

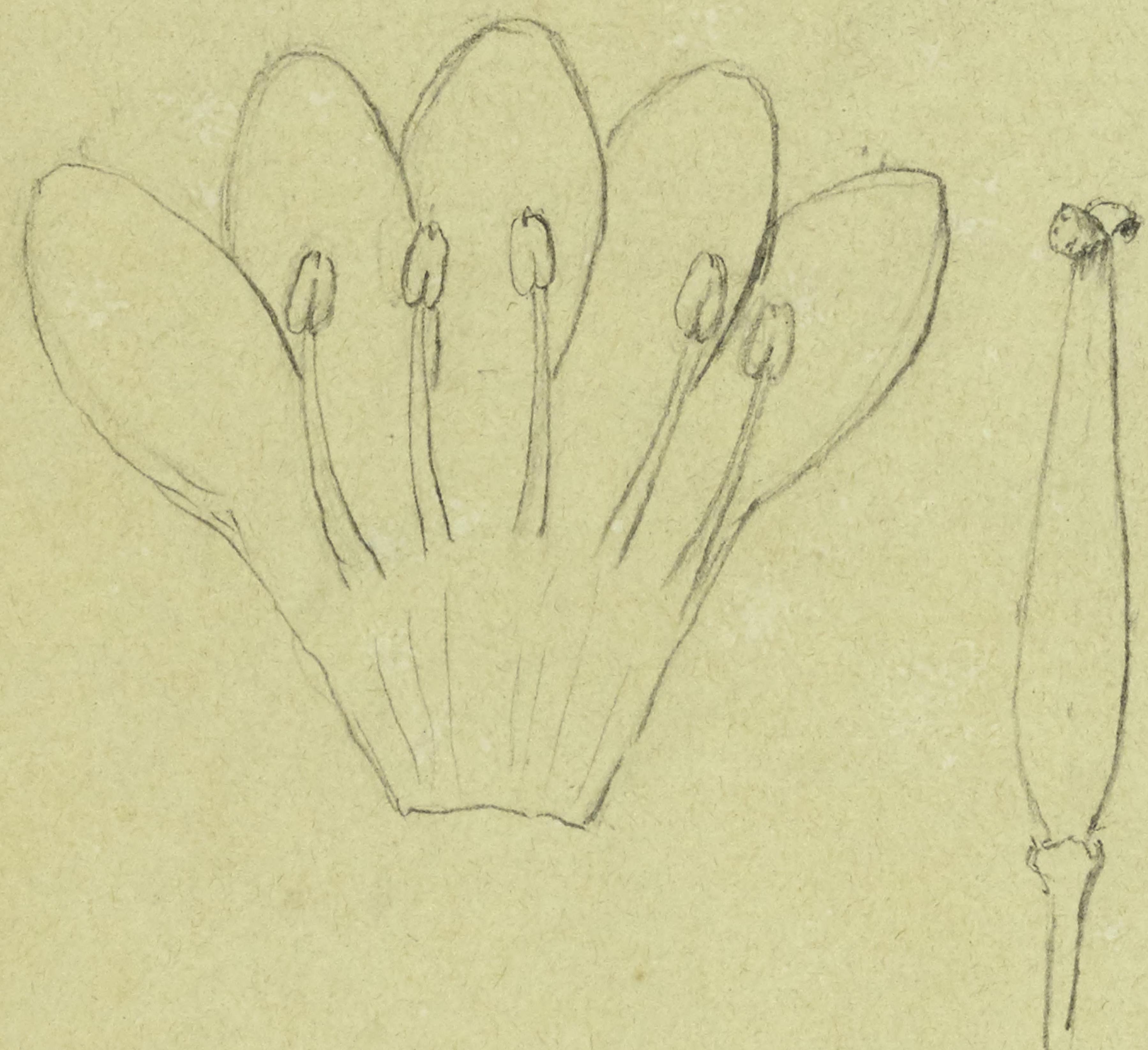
GEORGE ENGELMANN
BOTANICAL NOTEBOOKS

Pagination Note:
Since many of the items lack a specific page number, the page number displayed online refers to the sequentially created number each item was given upon cataloging the materials.

Gontiana Patagonica

Dec 1861

x4



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cm

copyright reserved



MISSOURI
BOTANICAL
GARDEN

M. W. ALEXANDER,
SOUTH-EAST CORNER OF FOURTH AND MARKET STREETS,
ST. LOUIS.

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

3990



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MISSOURI
BOTANICAL
GARDEN

Gent. Delosaa

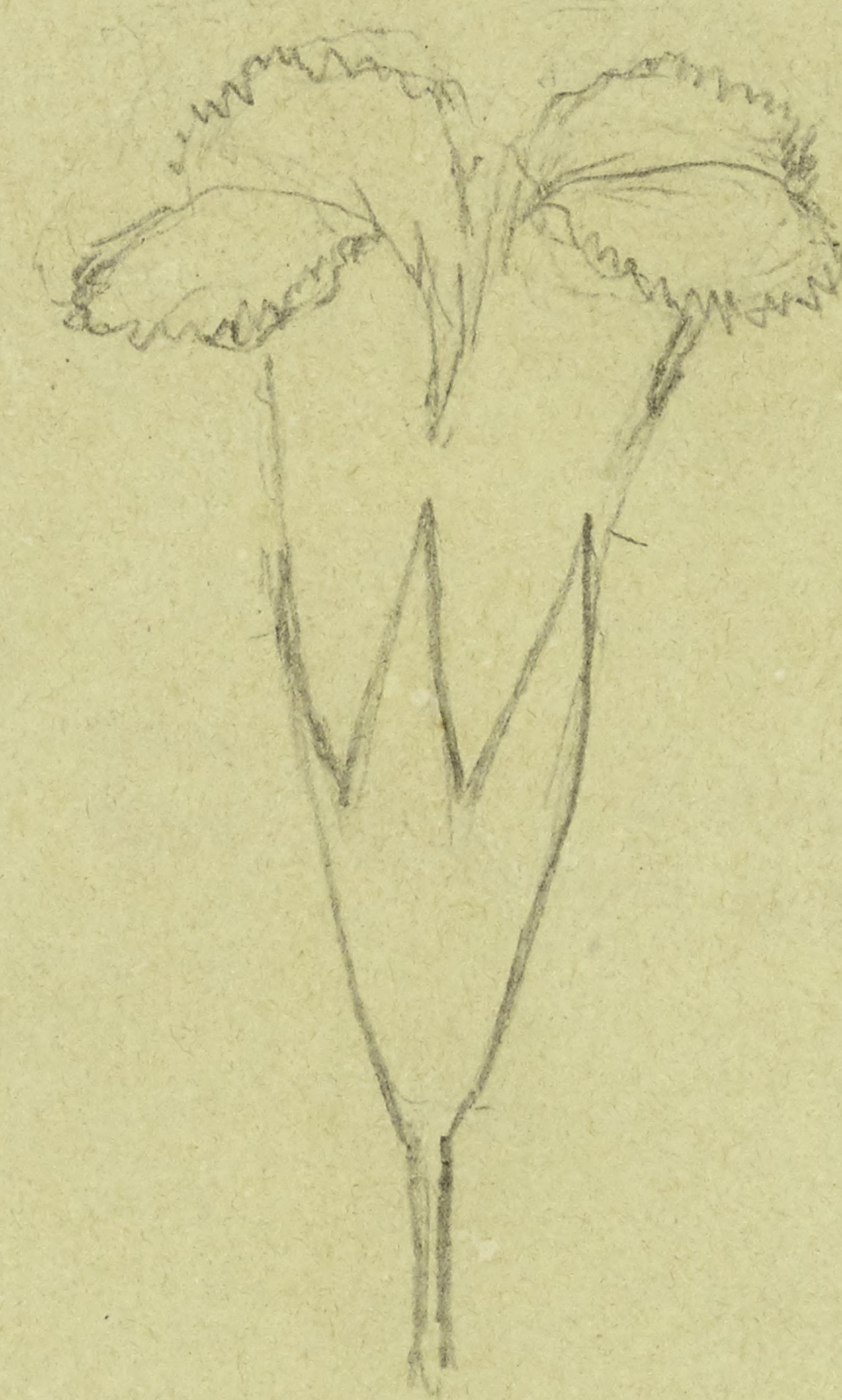
Dec 1861



caps. stipit



Seed. magnat



Kansas Prairie
H. C. Wilson

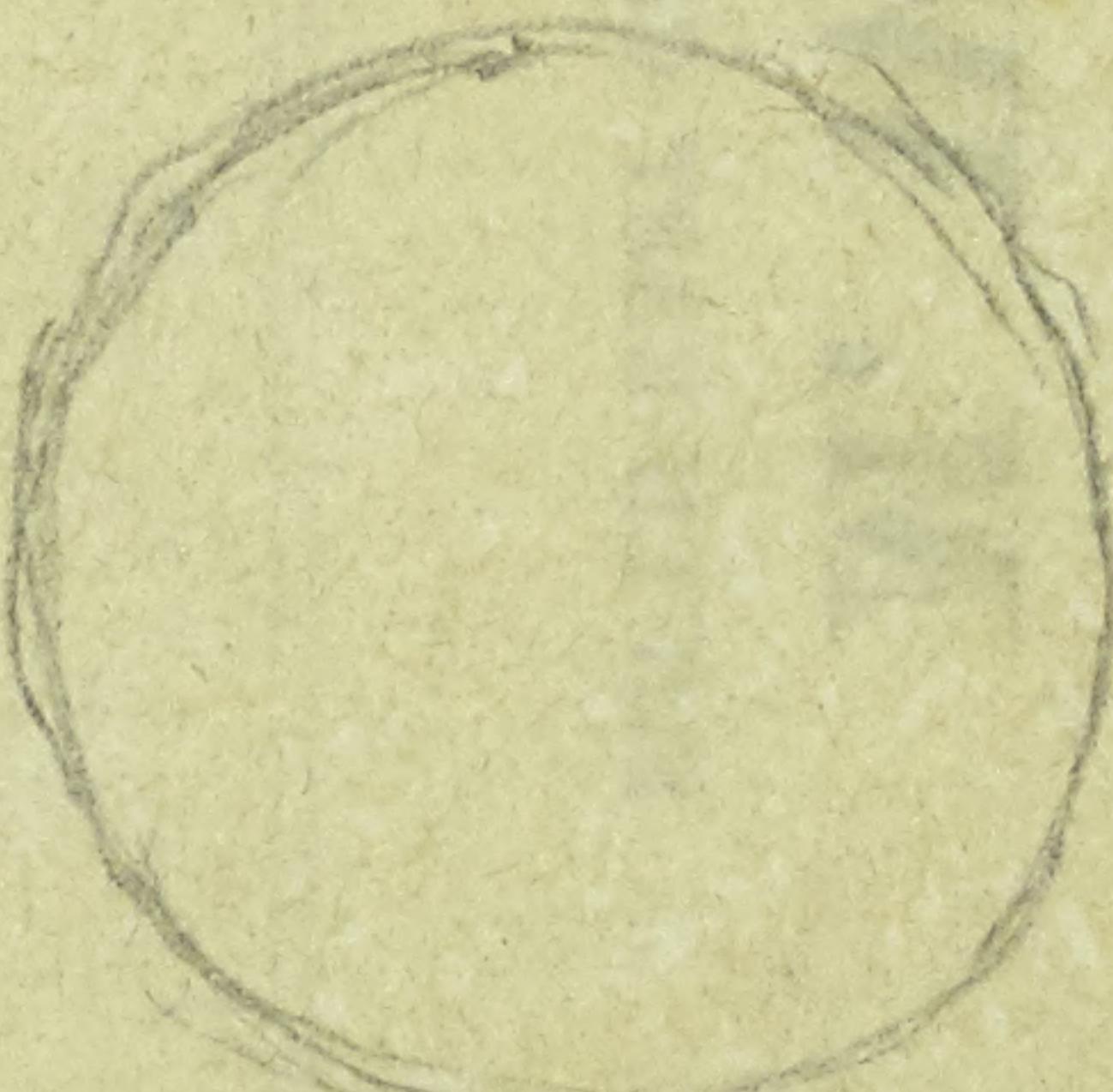
x 4



x 4



stipit.



0 1 2 3 4 5 6 7 8 9 10

cm

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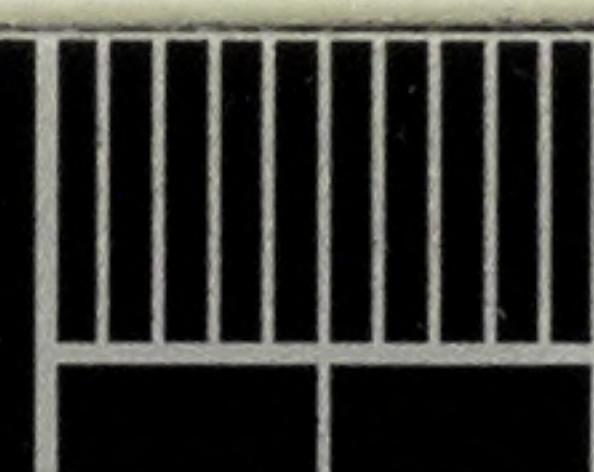
MISSOURI
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SOUTH-EAST CORNER OF FOURTH AND MARKET STREETS,
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MISSOURI BOTANICAL GARDEN
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3991



0
cm

1 2 3 4 5 6 7 8 9 10

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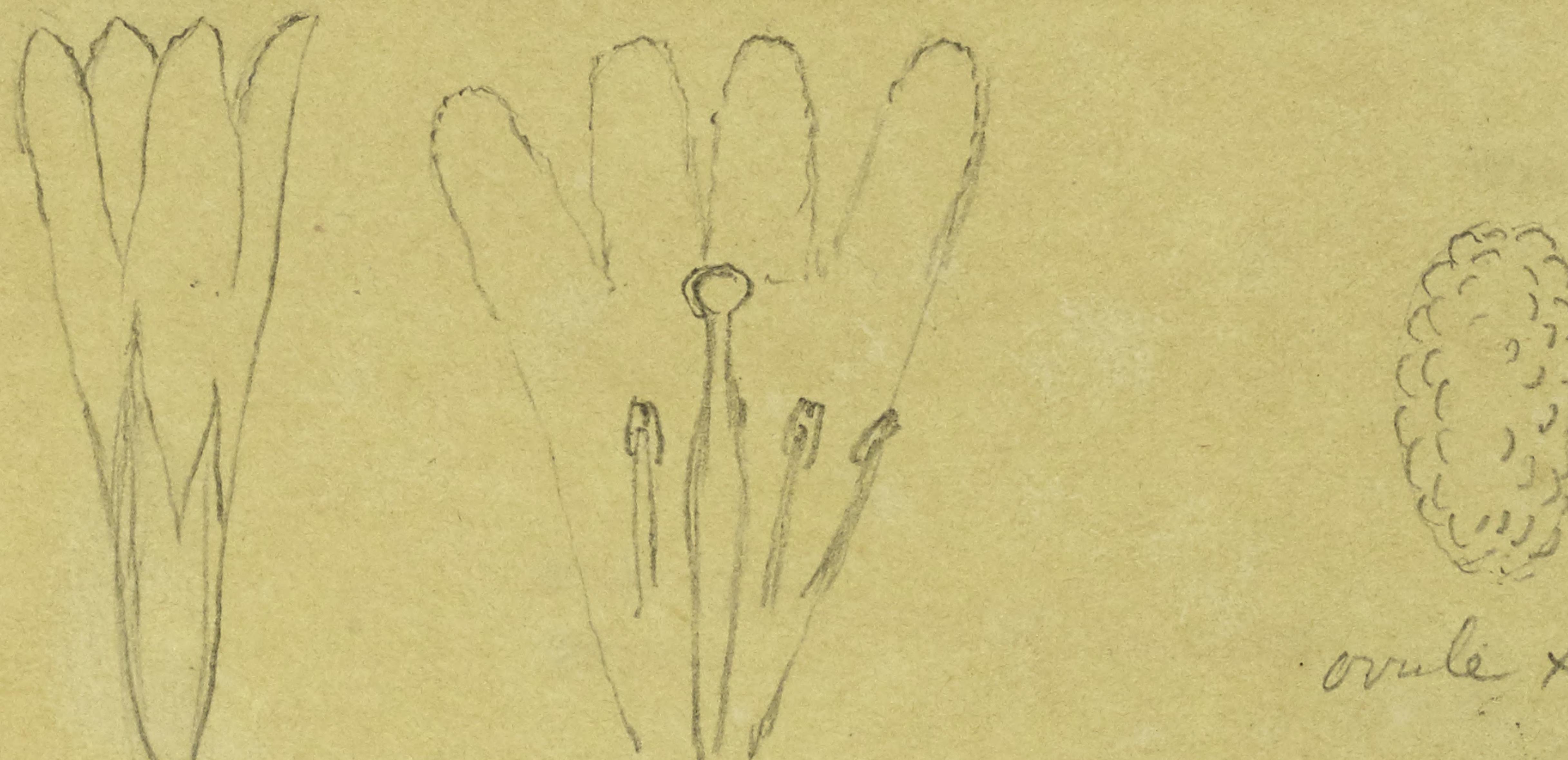
MISSOURI
BOTANICAL
GARDEN

Gent. detonsa

"Gentianae Simplex"

Nov 9 1874

Sierra Nevada, 8000' alt. Bolander 1866. No 6359



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cm

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MISSOURI
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GARDEN

HENRY EHREHARDT,
PHARMACEUTICAL CHEMIST,
No. 301 South Fifth Street, Cor. Myrtle, ST. LOUIS.

187

Date

No.

Ort

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

3992



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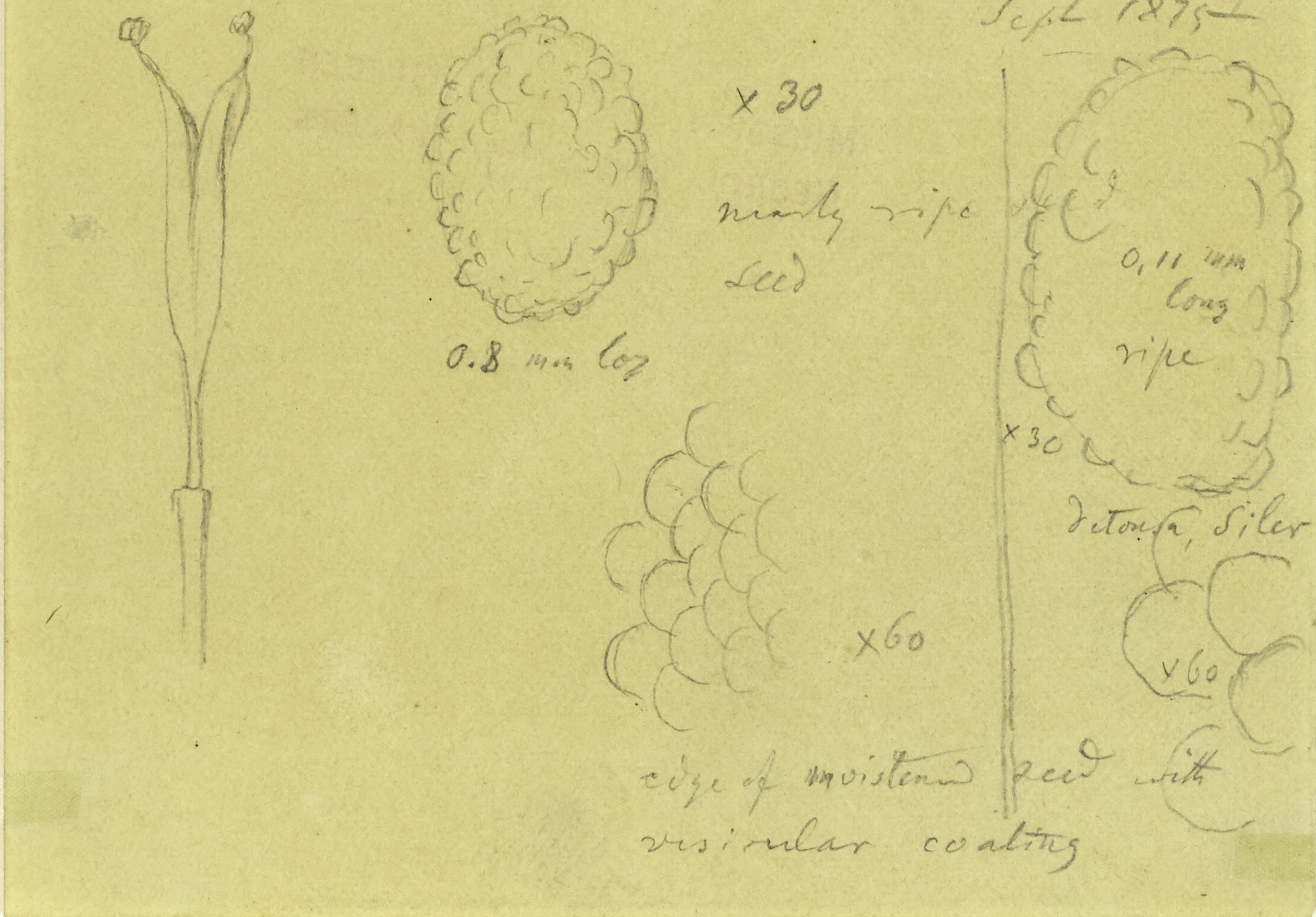
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MISSOURI
BOTANICAL
GARDEN

Gentiana detonsa Oct 10 1877
A. Nels. No. 313. Kern River Calif.

Sept 1875



0 1 2 3 4 5 6 7 8 9 10

cm

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MISSOURI
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GARDEN

3993

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GEORGE ENGELMANN PAPERS



0 1 2 3 4 5 6 7 8 9 10
cm

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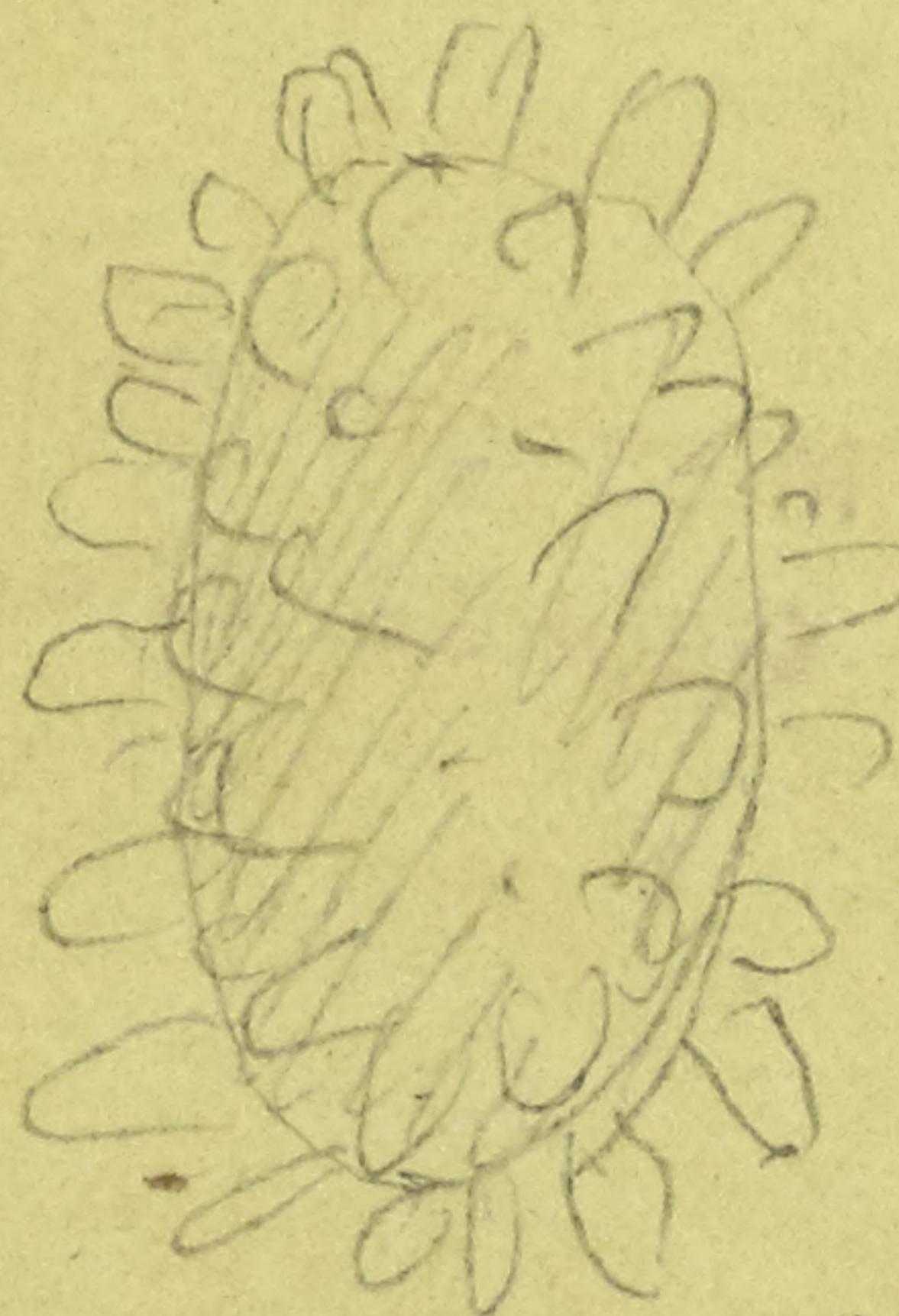
MISSOURI
BOTANICAL
GARDEN

Gentian Detonsa
Wist. Lapham

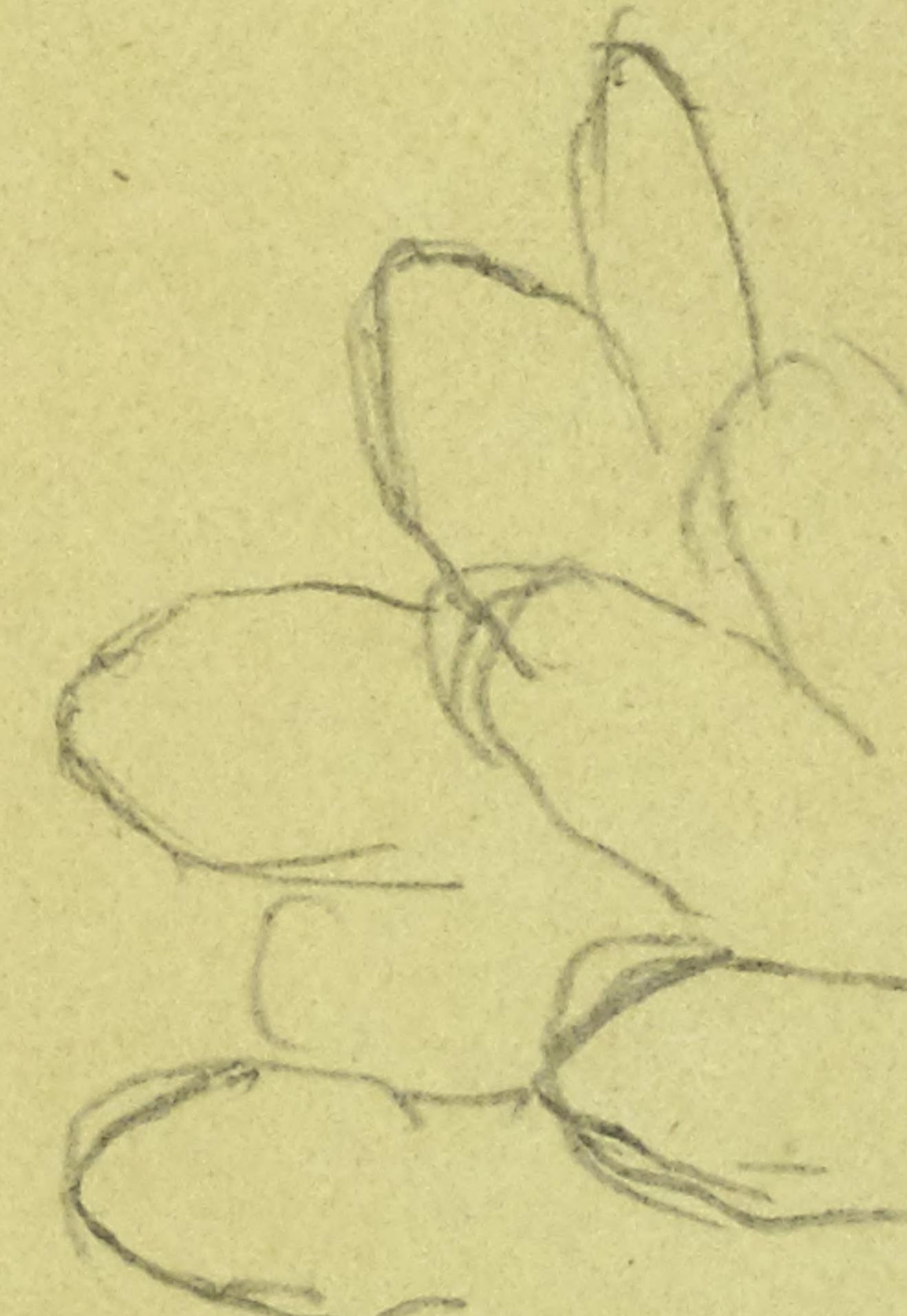
Oct 11
1877



mature capsule



$\times 30$ 0.8 mm
long



$\times 60$
ovule-ovule
vesicles



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved



MISSOURI
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GARDEN

3994

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0 1 2 3 4 5 6 7 8 9 10

cm

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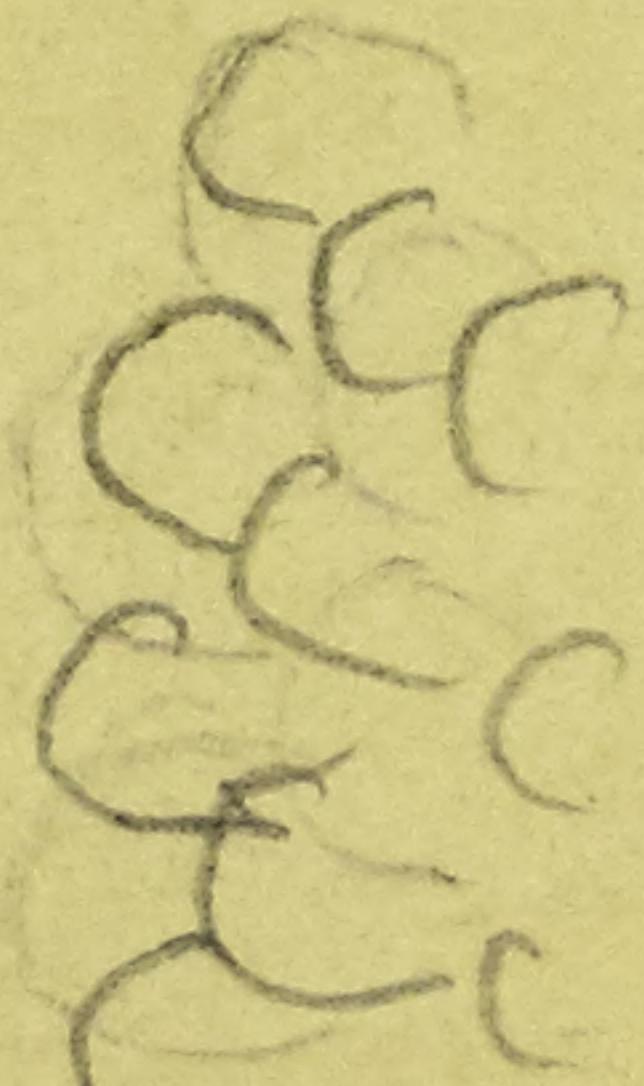
MISSOURI
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GARDEN

260

Gentiana detonsa

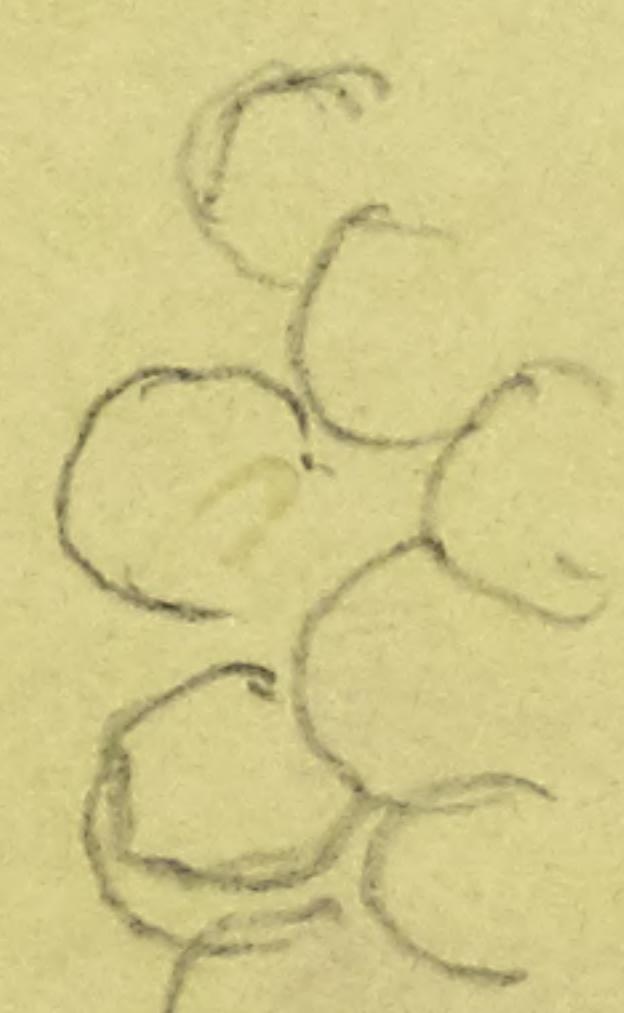
Oct 12 1877

seed 0.7 mm long



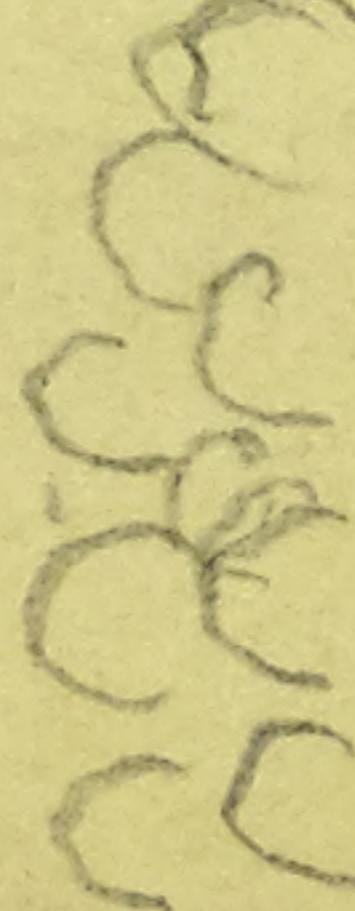
Henry Engelm.
Utah

0.5 mm



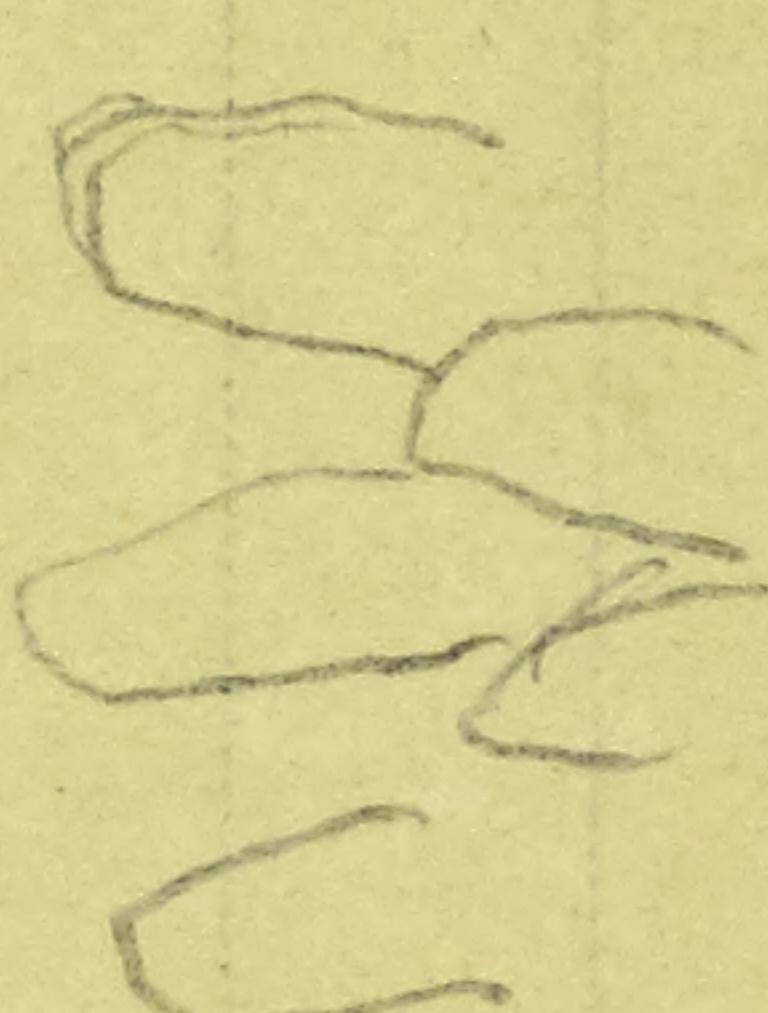
Richl. Ohio

0.8 mm



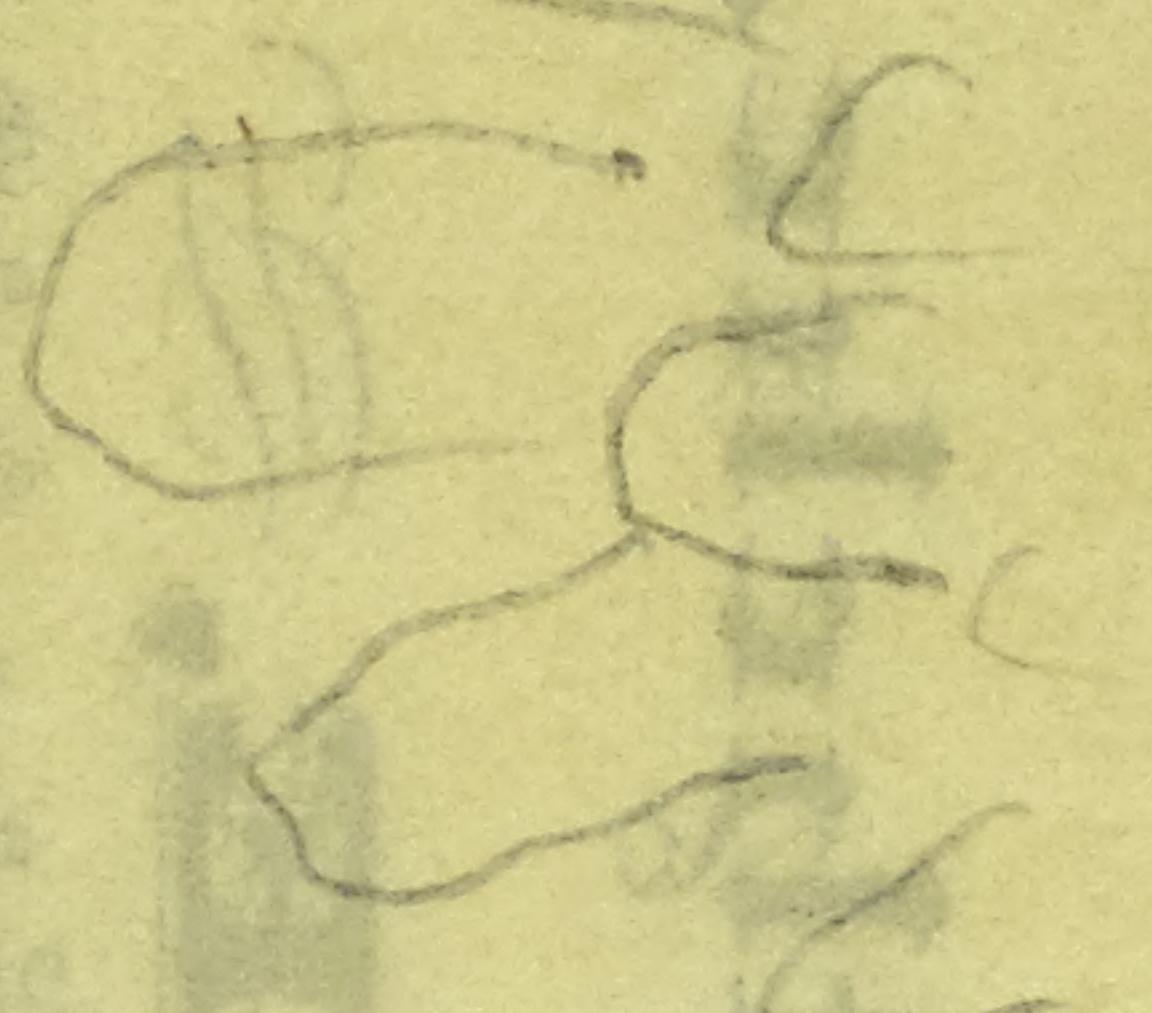
Richl. Ohio

0.6 mm



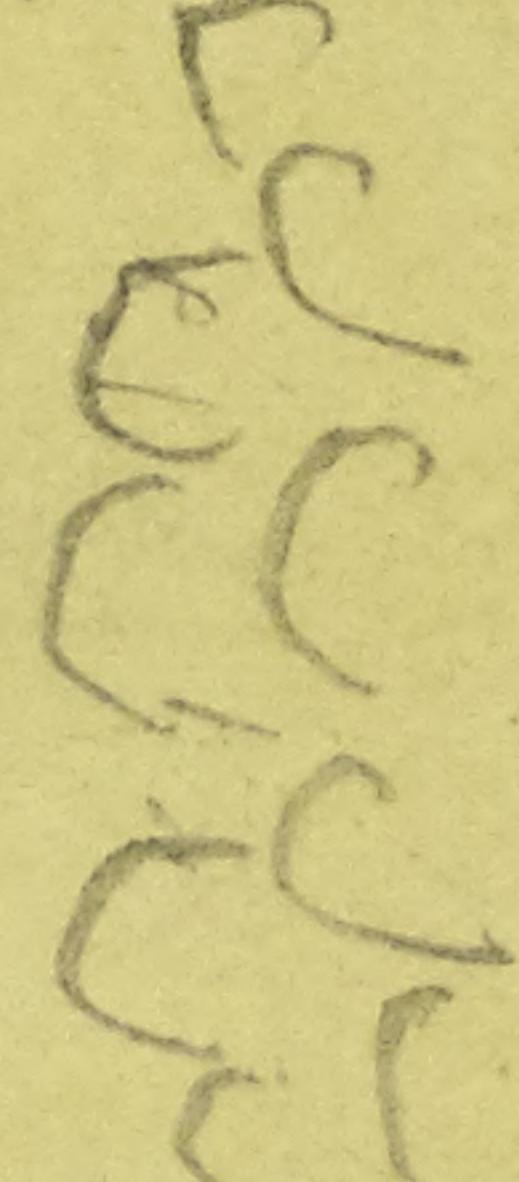
Sykes, Minnesota

0.8 mm



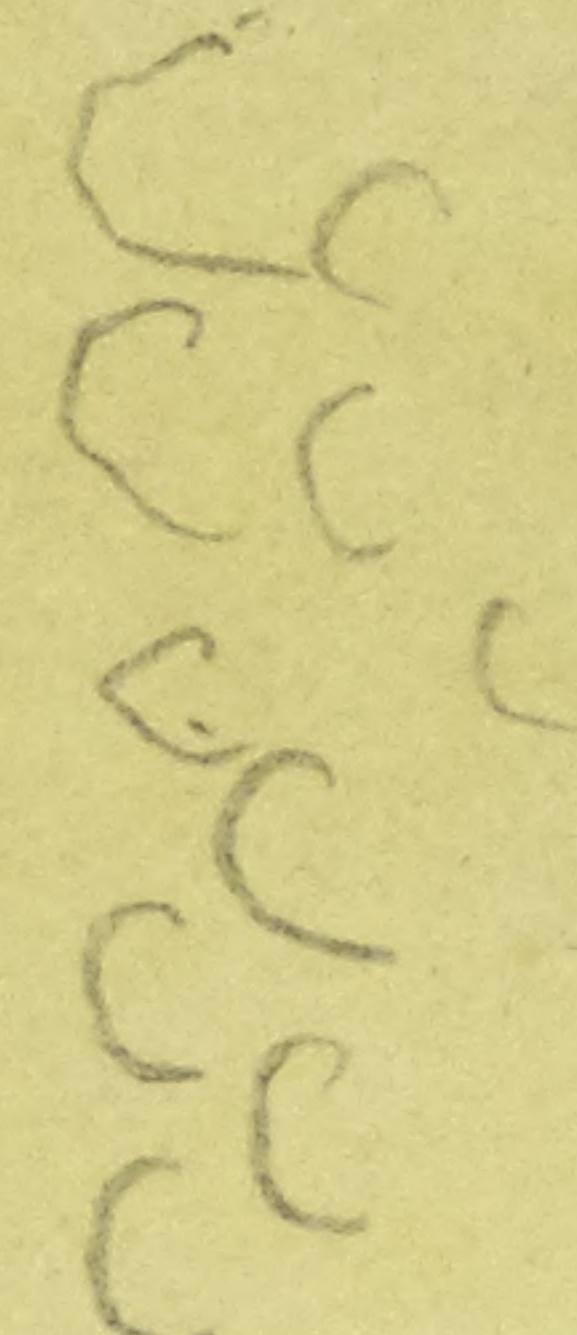
Lapham
Wiscon

seed 0.7 mm long



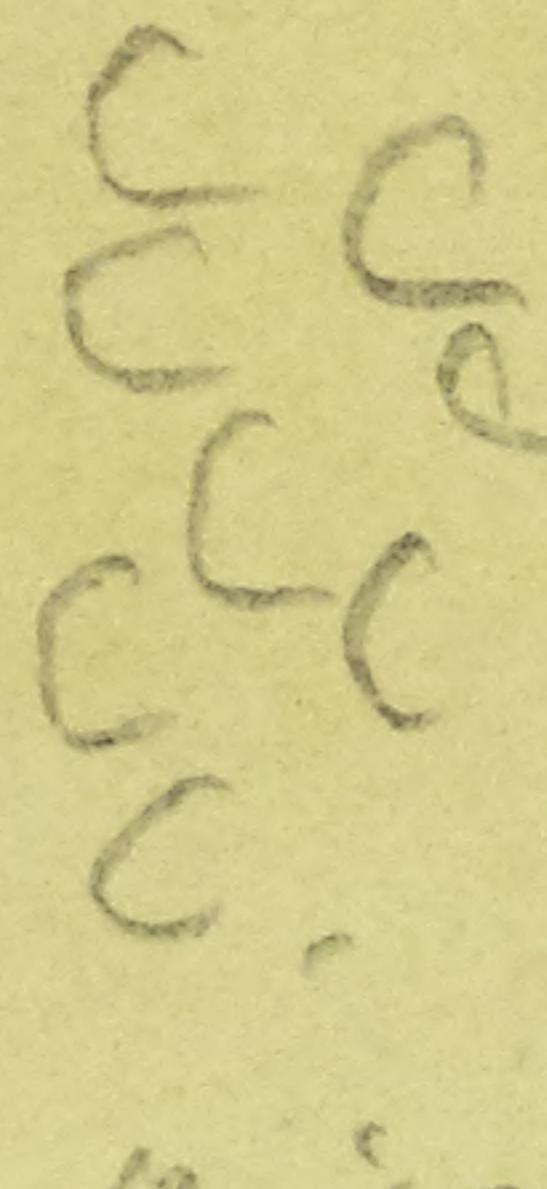
Antioch
Bronx

0.5



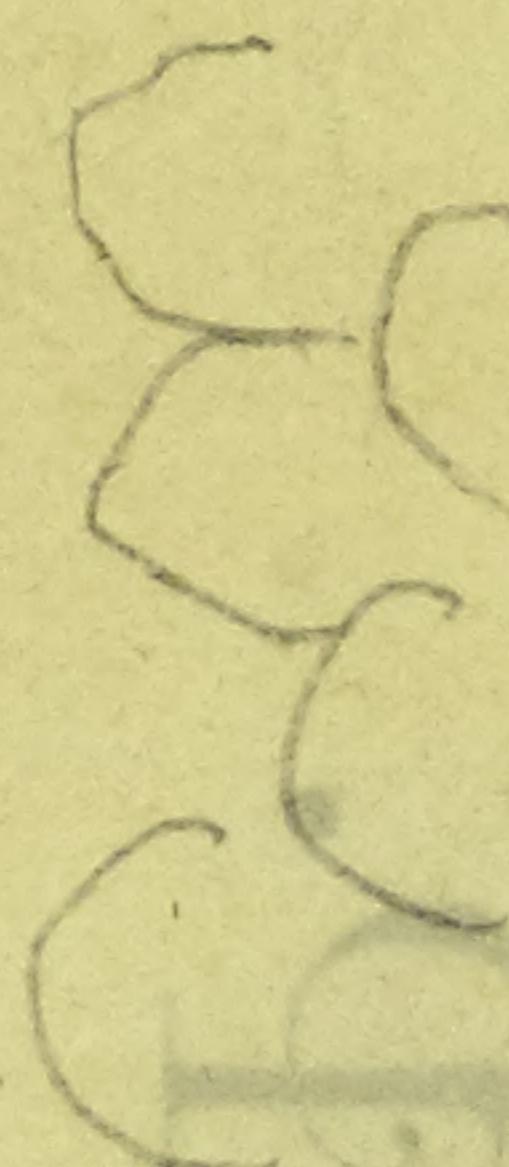
Hall & Harben
Colorado

0.4



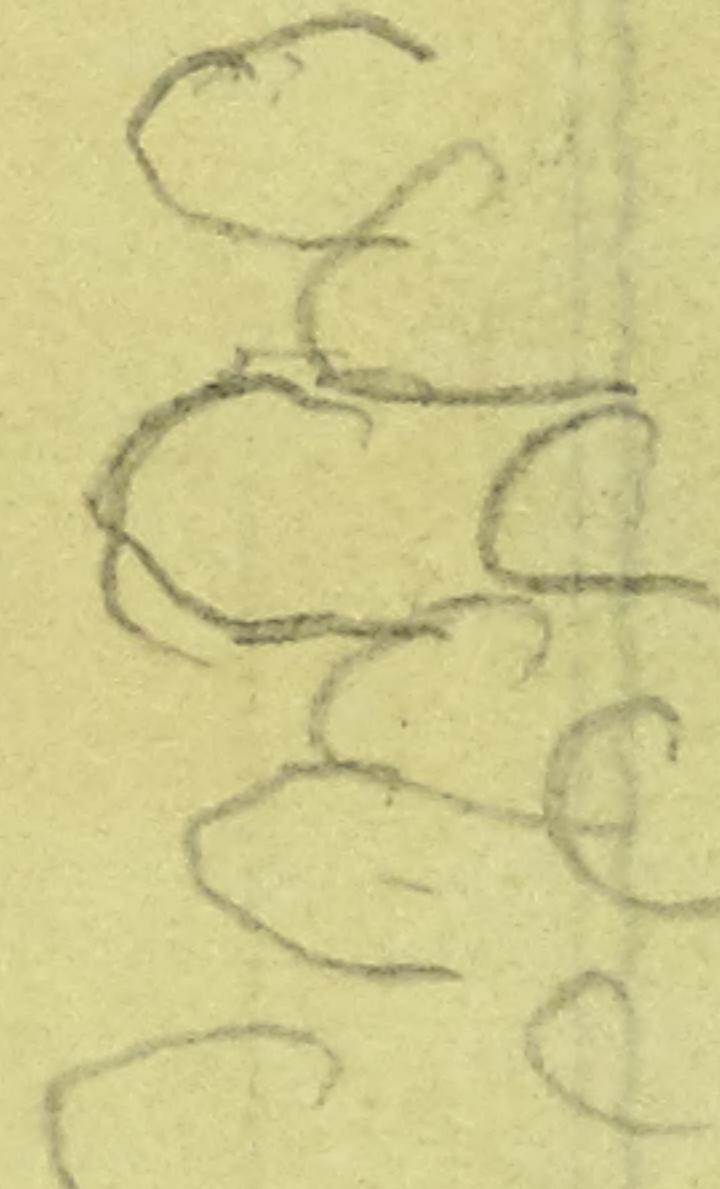
Michigan
J.E. '72

0.6



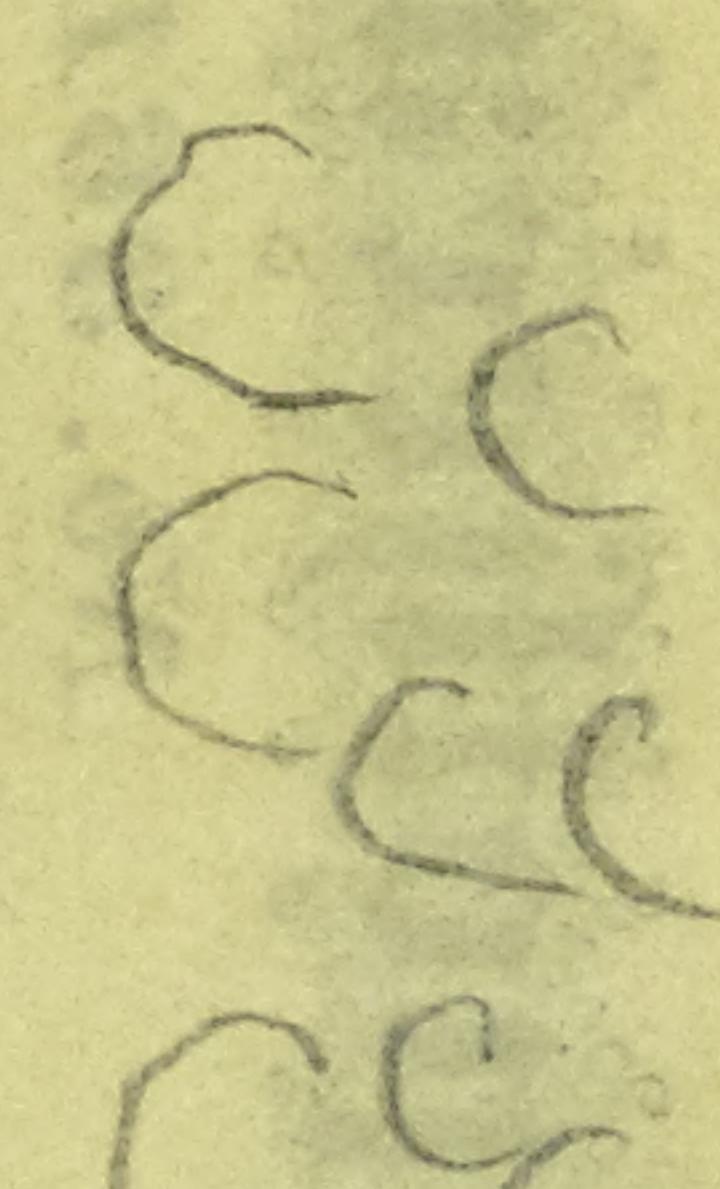
Vaden
Colorado

0.7

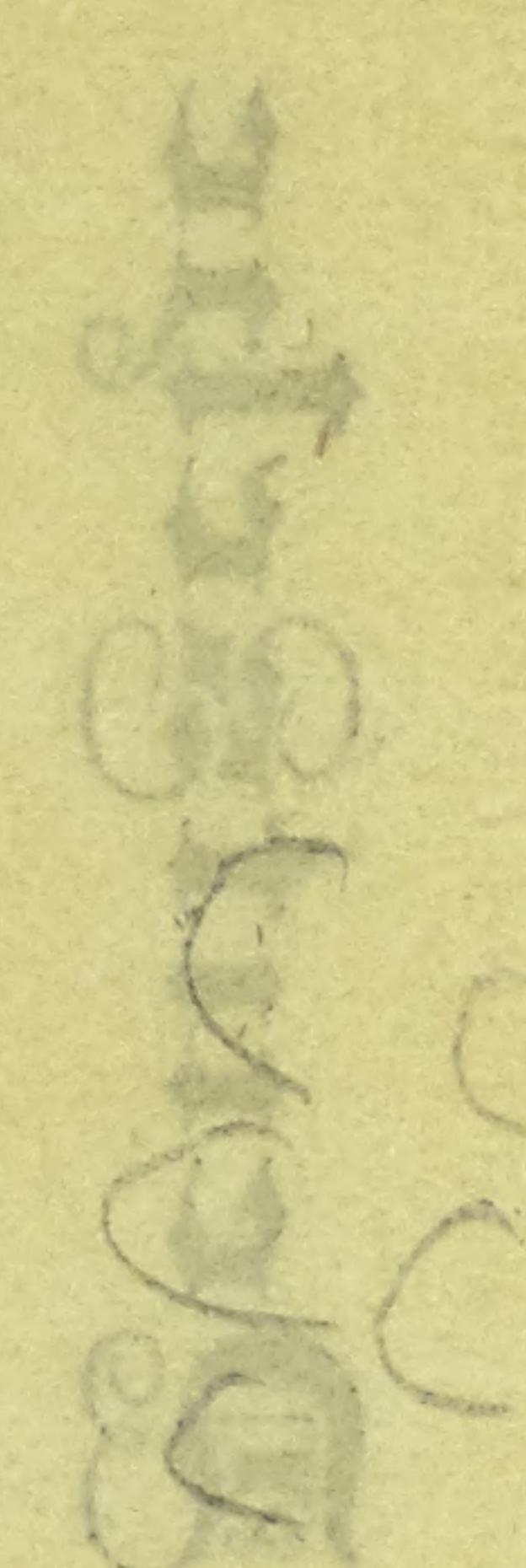


Calif.
(Gray)
min

0.7



Blader
2847



Bolander
1866



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cm

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MISSOURI
BOTANICAL
GARDEN

Deutsche Aphontologie.

GEORGE ENGELMANN



No. 3610 North 10th Street,
Between Mallinckrodt and Salisbury,

No.

For

187

R.P.

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

3995



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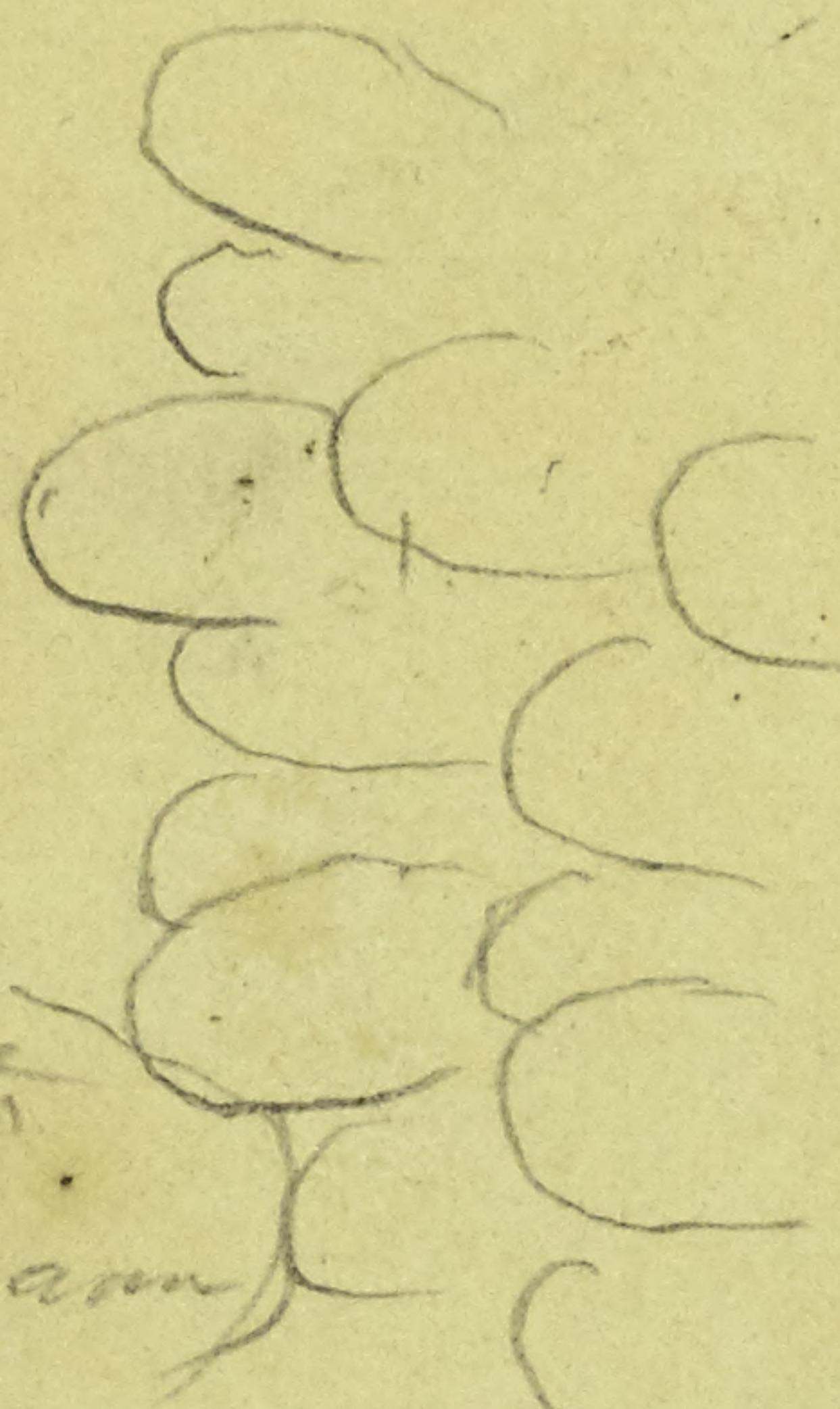
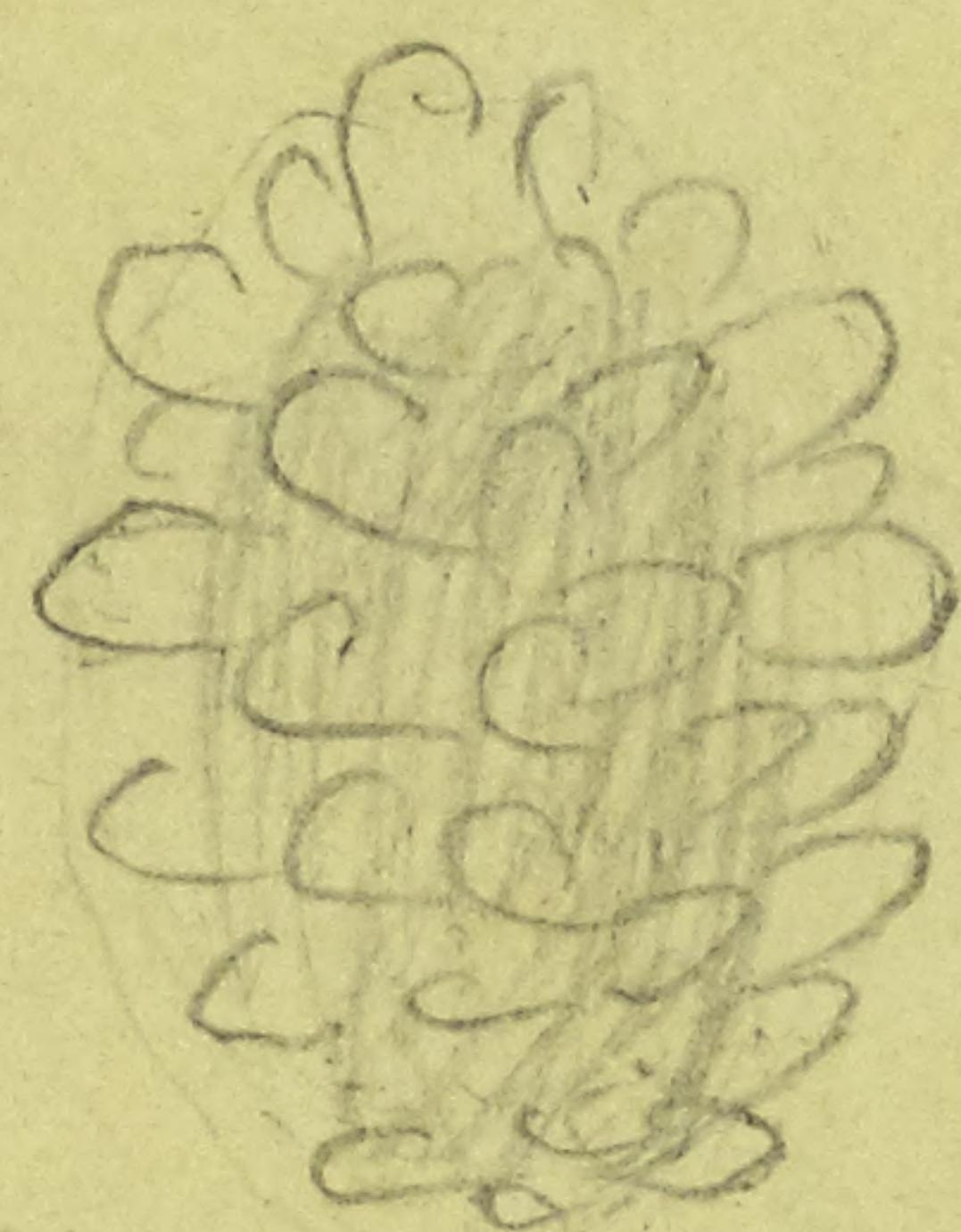


MISSOURI
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GARDEN

G. invicta Oct 10 1877
Minnesota, Sykes



x30

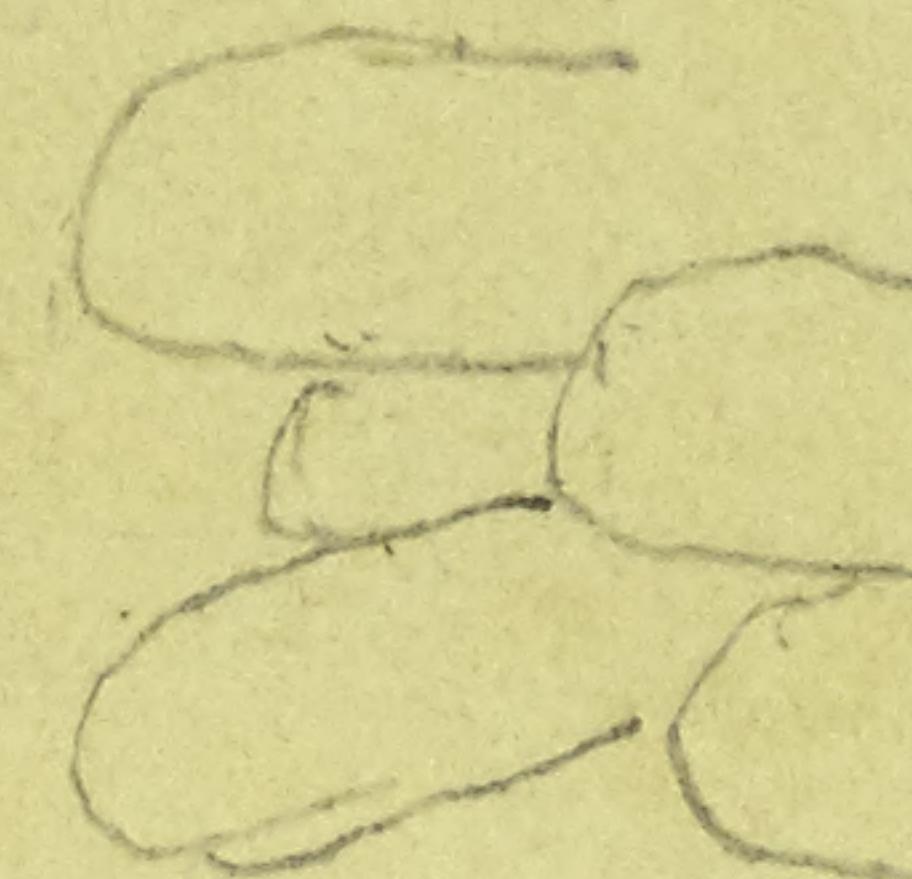


x60

(W. C. Miller, Minnesota
is exactly the same)

Connell, Eaton
sam fruit & seed

vesicles
in oblong



0 1 2 3 4 5 6 7 8 9 10

cm

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GARDEN

3996

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
0 1 2 3 4 5 6 7 8 9 10

cm

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MISSOURI
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GARDEN



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cm

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3997

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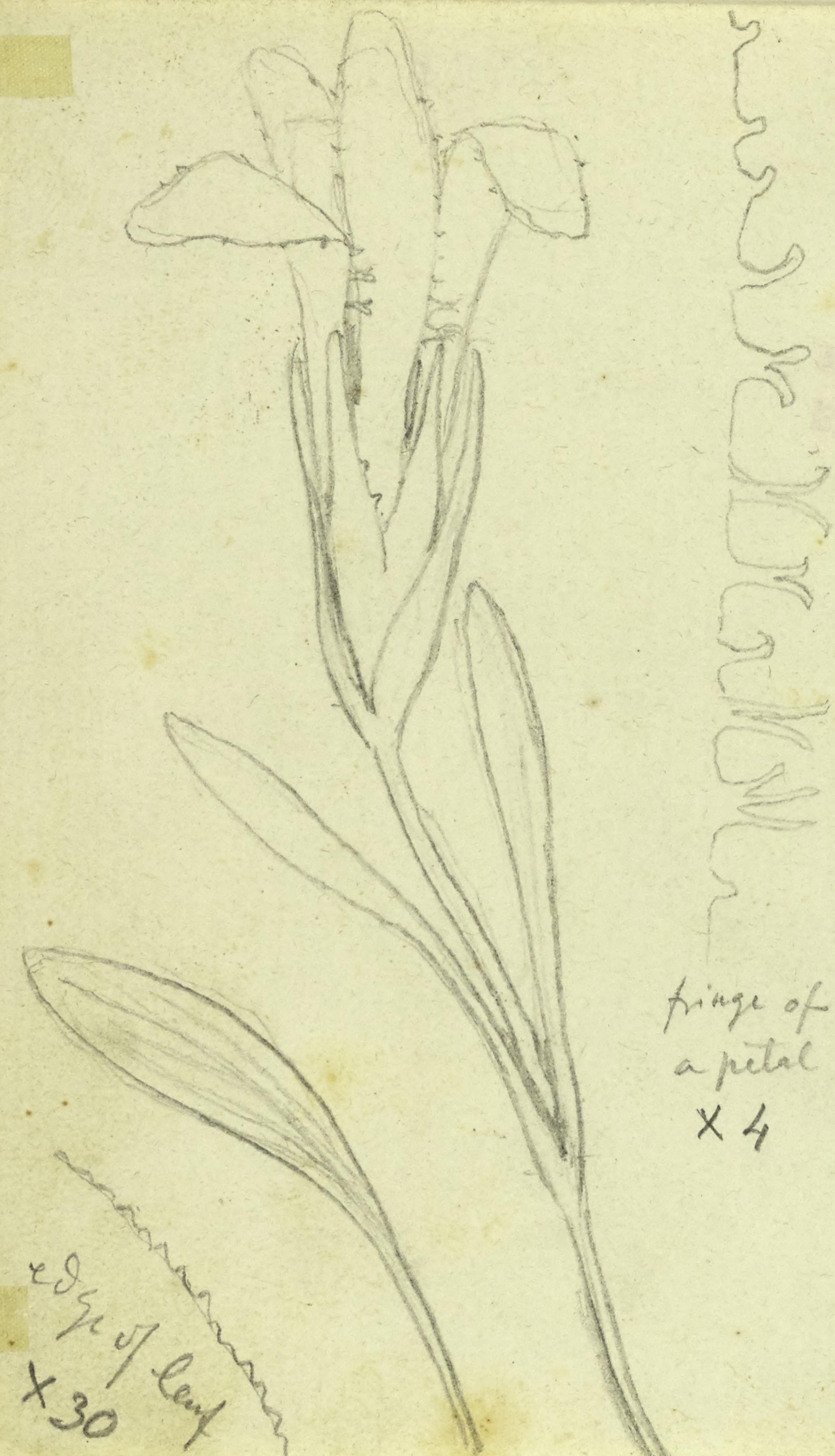
10

cm

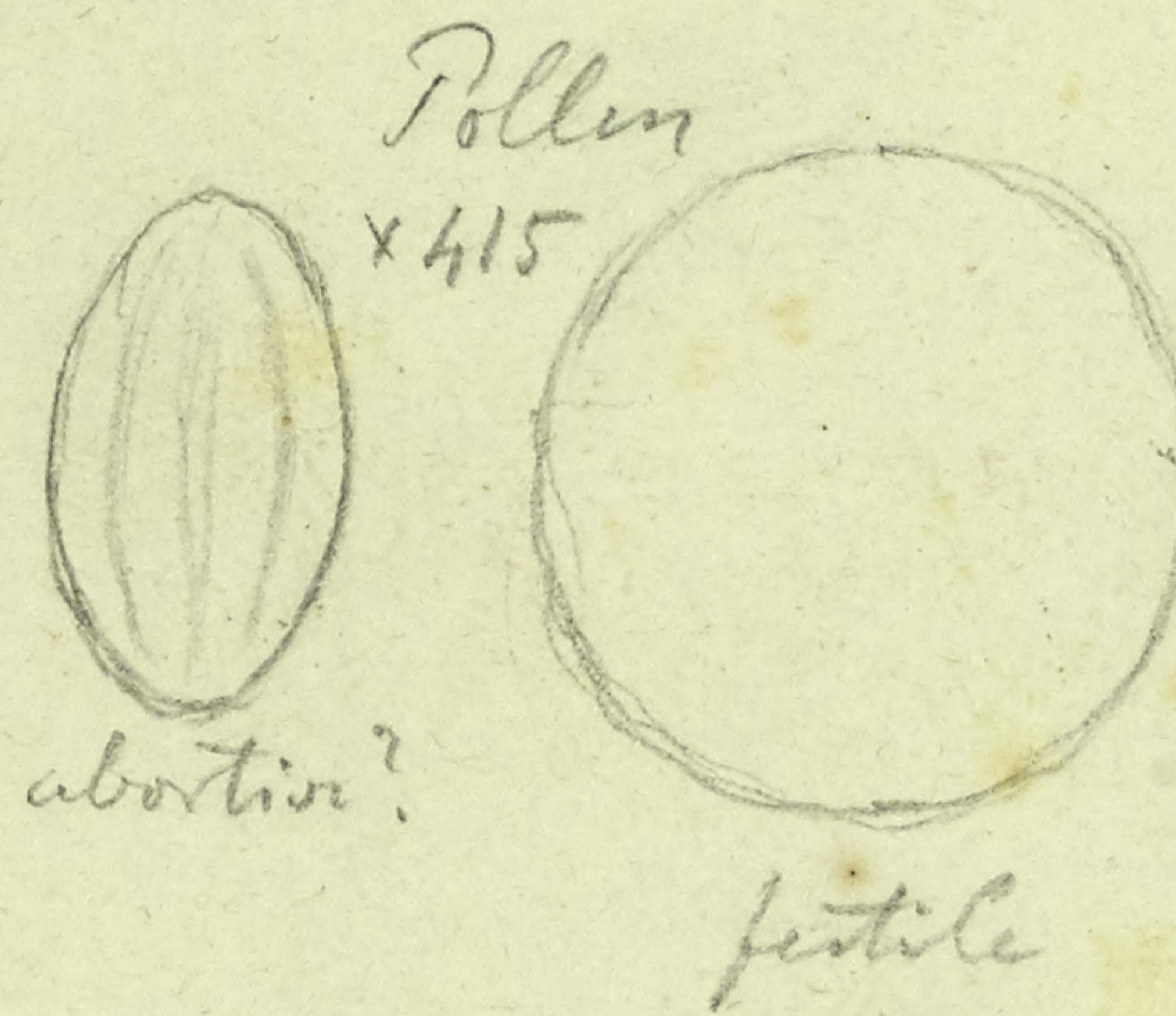
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fringe of
a petal
x 4

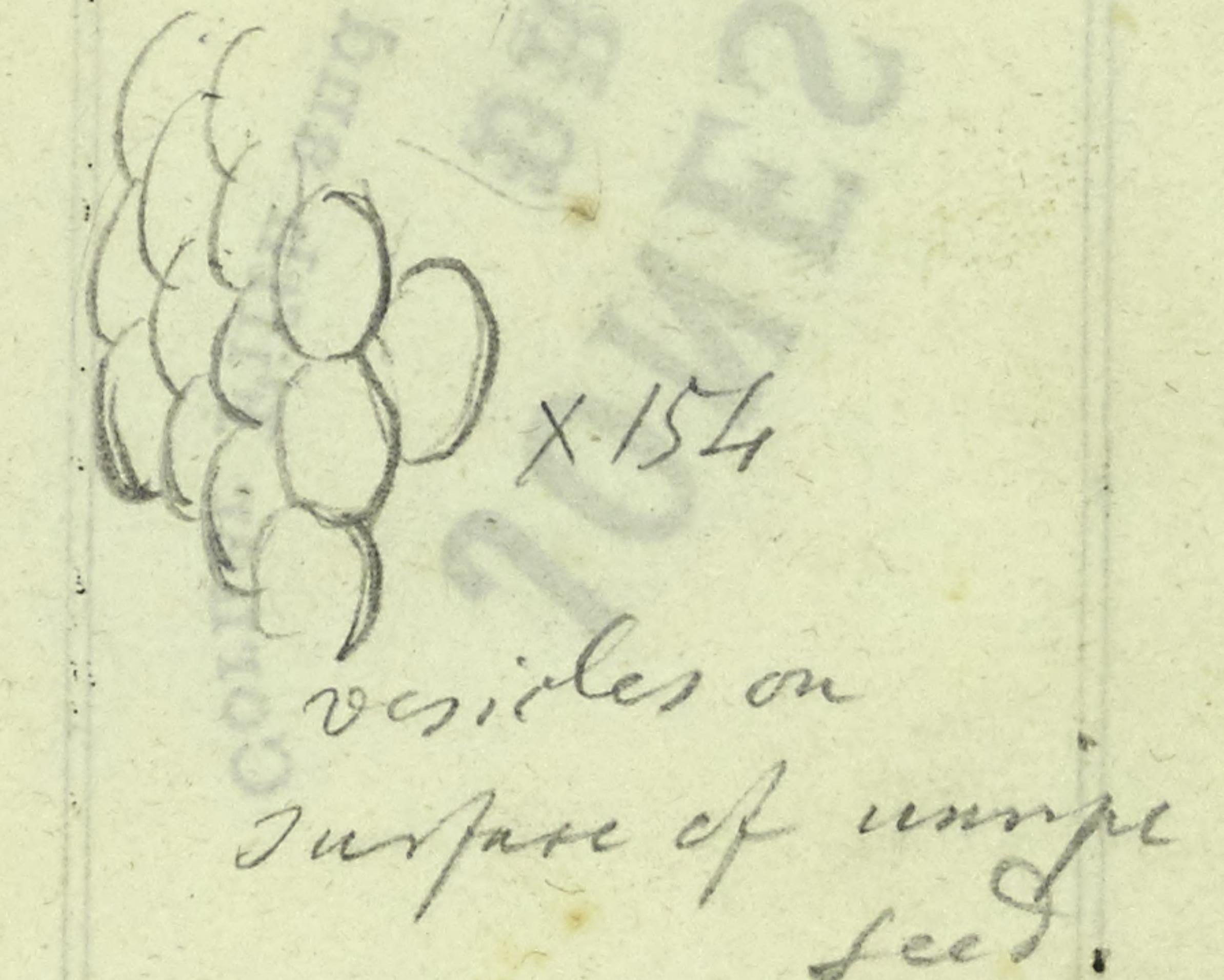


Gentiana verbenacea
Dr. Gray

Sept 25 1862



unripe seed. 5 cm long



0 1 2 3 4 5 6 7 8 9 10

cm

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MISSOURI
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GARDEN

3998

JONES & LEITCH, DRUGGISTS,

Corner Fifth and Market Streets, St. Louis, Mo.

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS



0 1 2 3 4 5 6 7 8 9 10

cm

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MISSOURI
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g. barbellata

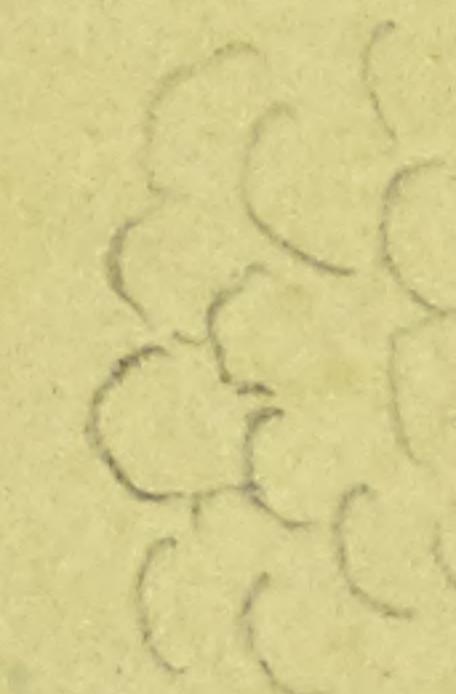
Oct 11 1877

g. E. Berthold Obs 1874



$\times 30$

0.4 mm long



$\times 60$

clavate capsule
attenuate into a stipe
stipe sessile



0 1 2 3 4 5 6 7 8 9 10

cm

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MISSOURI
BOTANICAL
GARDEN

3999

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS



0 1 2 3 4 5 6 7 8 9 10

cm

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MISSOURI
BOTANICAL
GARDEN



0 1 2 3 4 5 6 7 8 9 10
cm

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BOTANICAL
GARDEN

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GEORGE ENGELMANN PAPERS

4000



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cm

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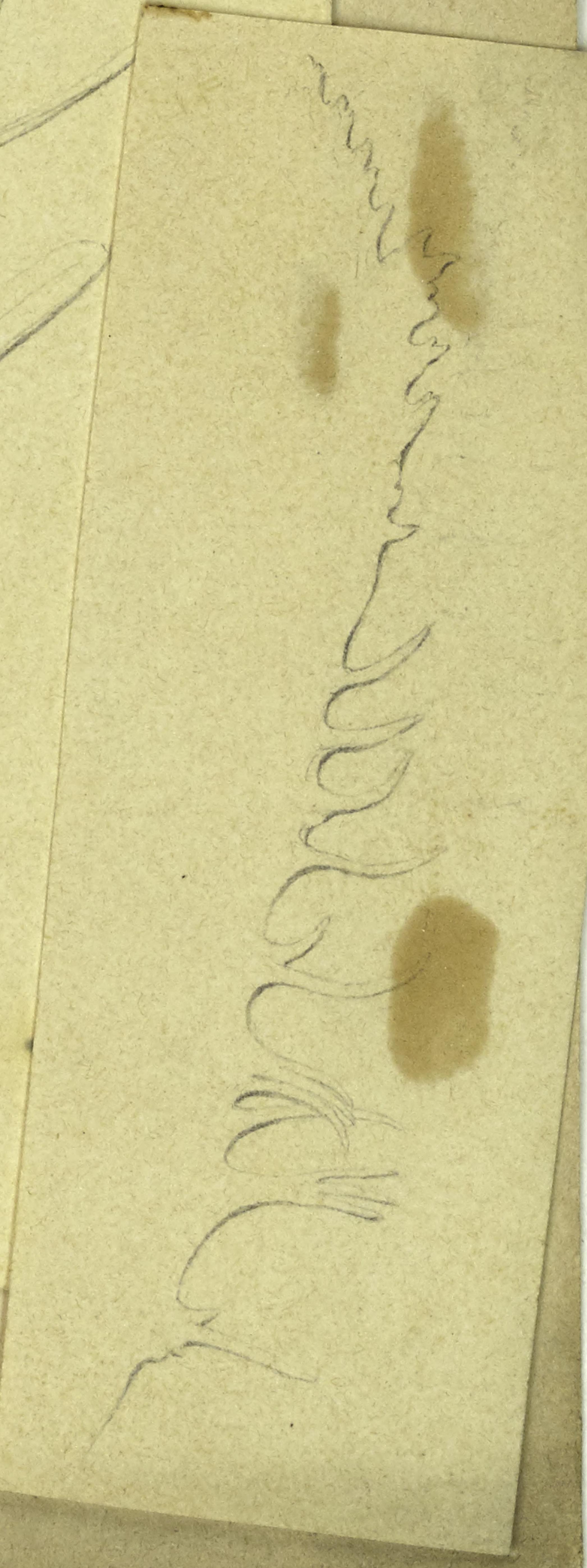


MISSOURI
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GARDEN

Gentian barbata



Roots del
Jan 1863



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cm

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
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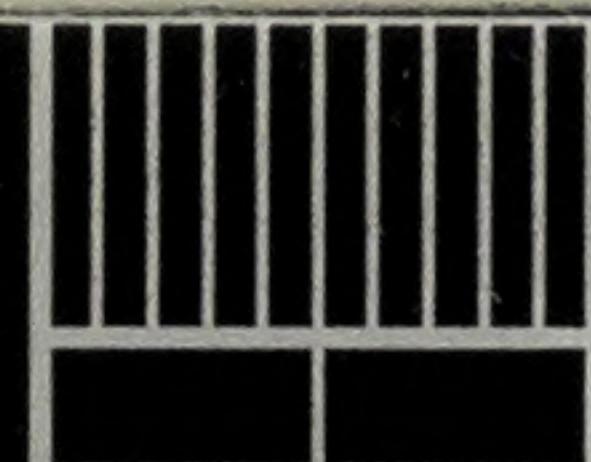
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BOTANICAL
GARDEN

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

4003



5 5003



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cm

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MISSOURI
BOTANICAL
GARDEN

Vegetation of *Gentianella* examined at Empress, Col

Sept 10 1875

Horizontal filiform stolons (?) 2 or 3 inches below surface, from root? several inches long, pushing up new stems.

Base of stem somewhat thickened, covered with black leaf-bases, so that the plant, superficially examined, appears biserial.

But these leaf-bases, carefully examined, show the growth of many years.

Each year the plant makes 2 pairs of radial leaves; a single flower-stalk is the axil of one of outer pair of these leaves — thus the remnants of 2 pairs of leaves on 2 rings, and of 1 flower-stalk indicate ~~an annual ring~~ but one year's growth; the flower-stalk may be wanting sometimes not having been developed.

I have examined a plant exhibiting 12 rings or leaf pairs (therefore 6 years old; besides the present flowering stalk I found the remnants of 6 other flower-stalks — 3 on the same side with the present one, and the first one at a right angle with them).

The flower-stalk is axillary as above stated, and the centripetal growth of the plant is unlimited. but the number of organs of the plant is limited (not without exception) and is the following: — ^{developed yearly} ~~the flower period~~

1. 1 pair of outer radial leaves, one of which — its axil bears the flower-stalk (of which below #6) ^{with the former}

2. a second pair of inner rad. leaves at right angles

3. a third pair, opposite the first, about 10 mm long now, one of the leaves with an axillary bud ^{of which below #6} long already showing the calyx leaves, bracts and flower-organs to be developed a year hence! — radial leaves of next year

4. a fourth pair, also 10 mm long, ~~being the~~ preparing to become the inner rad. leaves of next year.

5. a central bud $1\frac{1}{4}$ mm long showing plainly the 5 radial leaves to develop 2 years hence.

no axillary bud has yet been observed, belonging

6. the flowering stem ^(see above 1) with one pair of leaves ⁽²⁾ in the middle

at right angles with the first pair (1) from the axil of which the stem springs — a pair of upper leaves (6) just below the flower (therefore termed bracts: c, exterior d, interior calyx leaves) corresponding to calyx leaves & bracts, the former enclosing the

center. e & f 4 lobes of corolla connate after the manner of the geraniaceae and alternately with the Sepals; next come the 4

stamens opposite the Sepals, and then the two carpels, not quite parallel with

two corolla lobes, and ~~the~~ these falling into the interspace between two inner and outer

Calyx lobes

The complete plant, then, consists of 4 radial leaves, an axillary flower-stalk with 4 more leaves ^{the upper pair} approaching the flower and acting as bracts ^{as bracts} to the flower.

very rarely I find 2 or 3 flowers (the occurring one from the axil of the uppermost leaf pair of bracts), and still more rarely a second flower-stalk.

All the organs for the following year's vegetation are already performed when the plant is in flower, and a small central bud exhibits the 4 radial leaves of the year next that.

G. barbellata is quite fragrant!

Brundage

4004

~~Conjectural~~ 3

and say how ever you
like? now and my
by my mother was not very
: now and when by you
and my mother. ~~you~~
and ~~you~~ ~~you~~ ~~you~~
my ~~you~~ ~~you~~ ~~you~~
~~you~~ ~~you~~ ~~you~~ ~~you~~
~~you~~ ~~you~~ ~~you~~ ~~you~~

Carulnay

John George

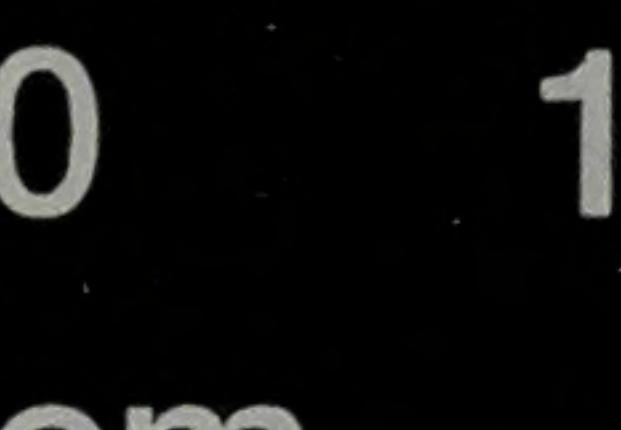
This image shows a blank, aged, cream-colored page. A vertical crease runs down the center of the page. In the upper left corner, there is a small, dark, irregular smudge or stain. The paper has a slightly textured appearance with some minor discoloration and faint, illegible markings that could be bleed-through from the reverse side of the page.

181

✓

A detailed botanical illustration of a flowering plant, likely a dandelion. The drawing shows a central stem with several leaves at the base and a cluster of small, yellowish flowers at the top. The style is scientific and precise, typical of 19th-century botanical art.

American shade with the reposition
at Vienna next year. This growth
entitles "food as products of
Industry." All is certainly very
desirable that the wines of
Missouri and the west should
be represented at the exhibition.



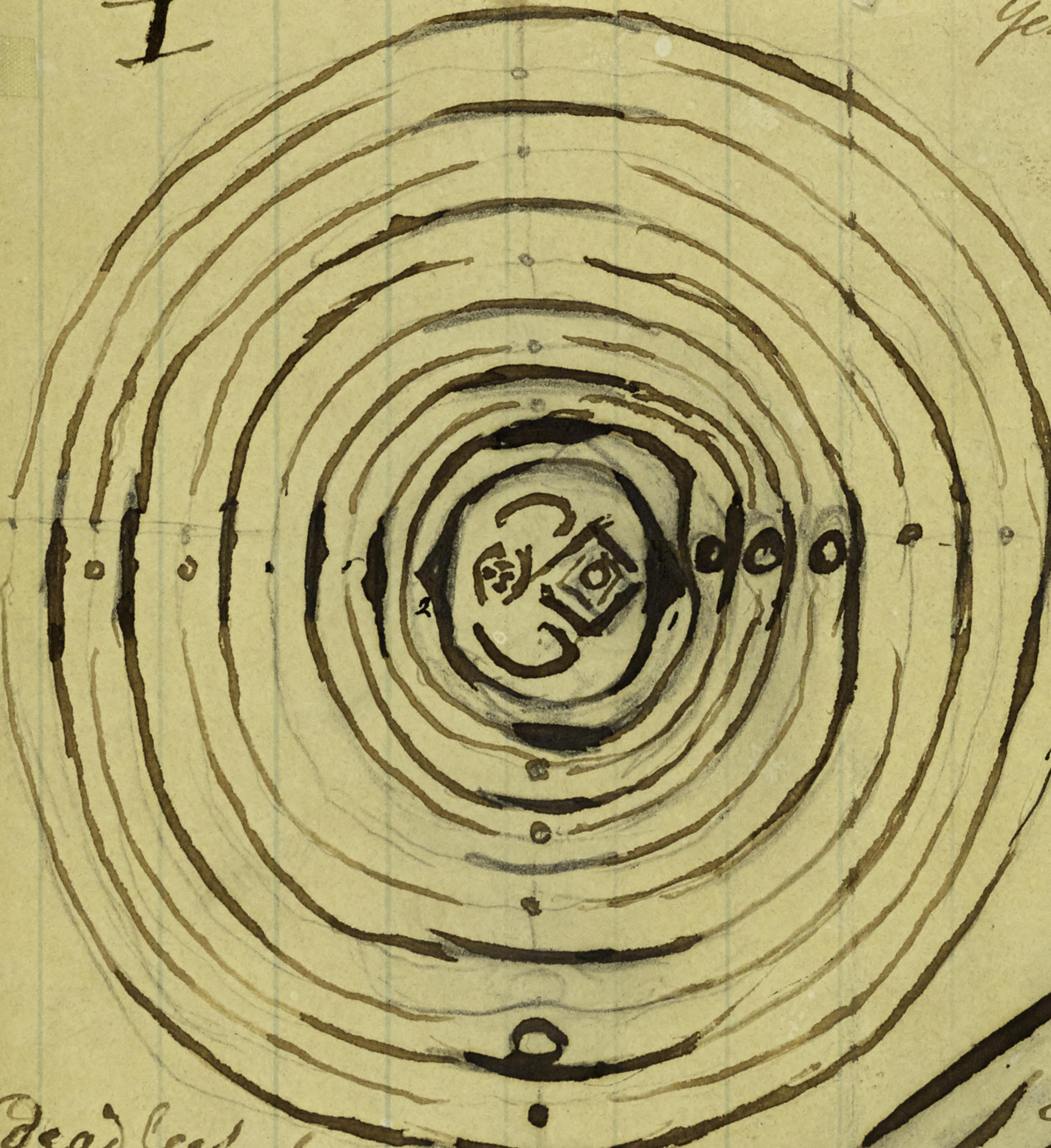
cm

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BOTANICAL GARDEN

I

*Gentiana Barbellata*

Captured Sept 10, 1874

II



III



1. 2 first pair of green leaves of the season in the axil of 1. the flower stalk; 3x4 second pair of leaves without axillary bud 5-6 small pair of leaves for next year, with flower stalk



0 1 2 3 4 5 6 7 8 9 10
cm

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MISSOURI
BOTANICAL
GARDEN

Canon City,

Sep't. 6th.

Dr. Geo. Engelmann,

Dear Sir, I have
rec'd. your letter from Empire
Trains run through from Denver
to Canon in one day. There are
only two hotels in Canon but they are
both pretty good. An omnibus will
be at the depot which is one mile
from the town. I will try to see
you as soon as you arrive in the
town and if I should not the pro-
prietors of either hotel can give
information in regard to me.

Yours truly,
G. S. Brantley

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

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cm

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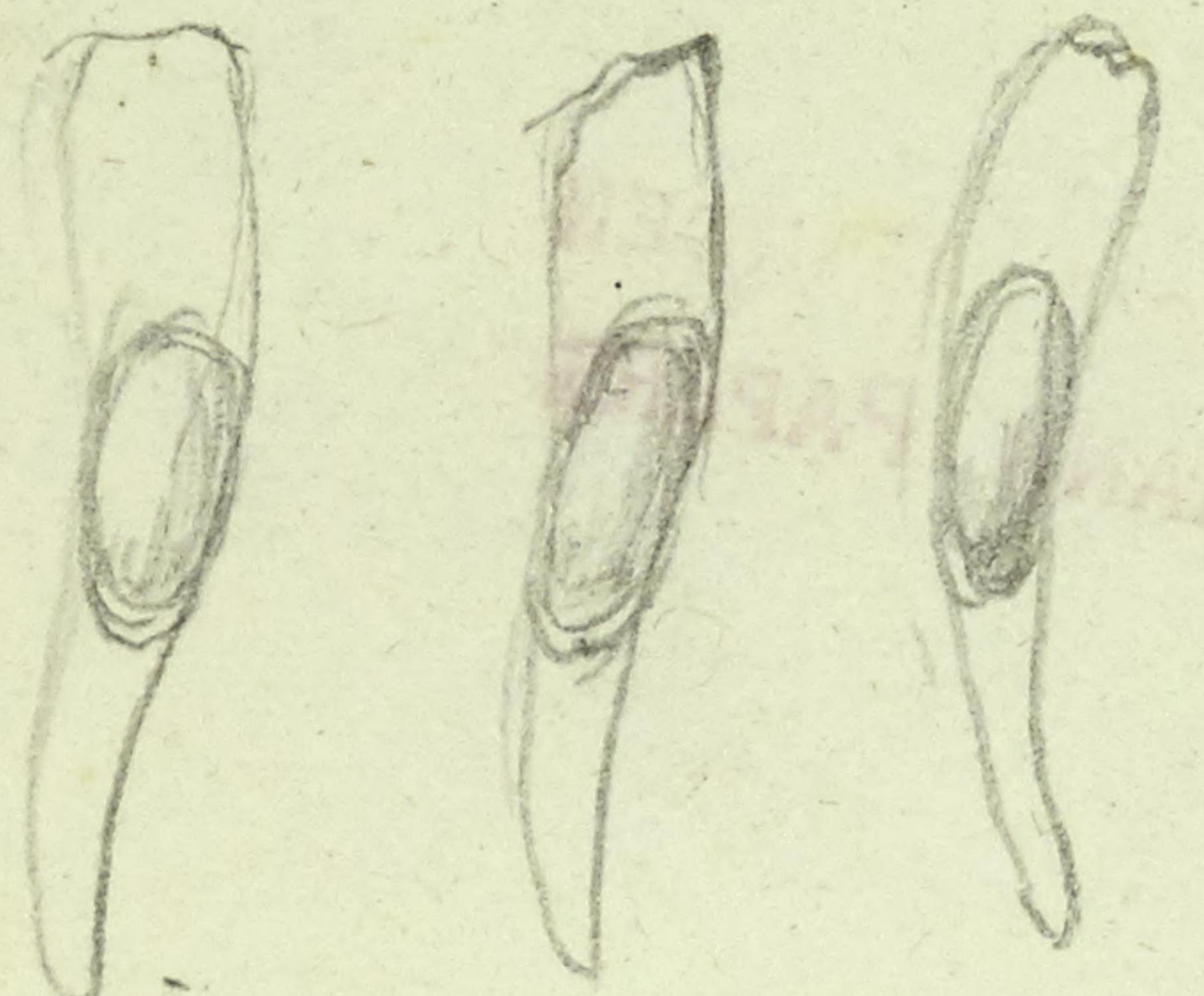
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MISSOURI
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GARDEN

Portieria ciliata
Sudetes

Scal 1862

$\times 30$



seed

LIP & OLIVE PRINTERS LTD



0 1 2 3 4 5 6 7 8 9 10
cm

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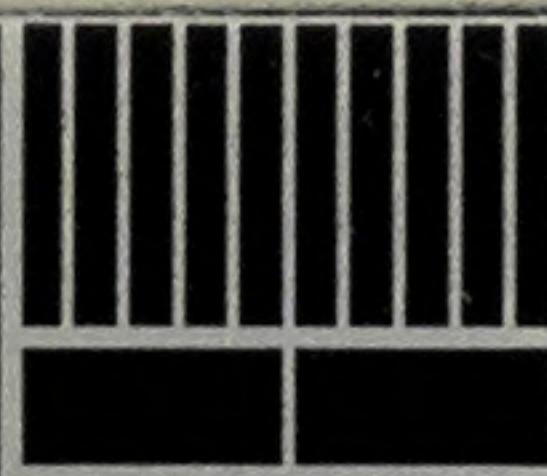


MISSOURI
BOTANICAL
GARDEN

4006

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

LITTELL
CHARMAGNETIST
North & Olive Sts. St. Louis, Mo.



0 1 2 3 4 5 6 7 8 9 10
cm
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MISSOURI
BOTANICAL
GARDEN

gentiana ciliata

annua Koch Sp. 492

Doull R

perennans Gris. - 80 Pow

g. 101

My species indeterminate
a perennial plant 98



0 1 2 3 4 5 6 7 8 9 10

cm

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GARDEN

4007

paper
MISSOURI BOTANICAL GARDEN
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cm

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Gentiana crocea

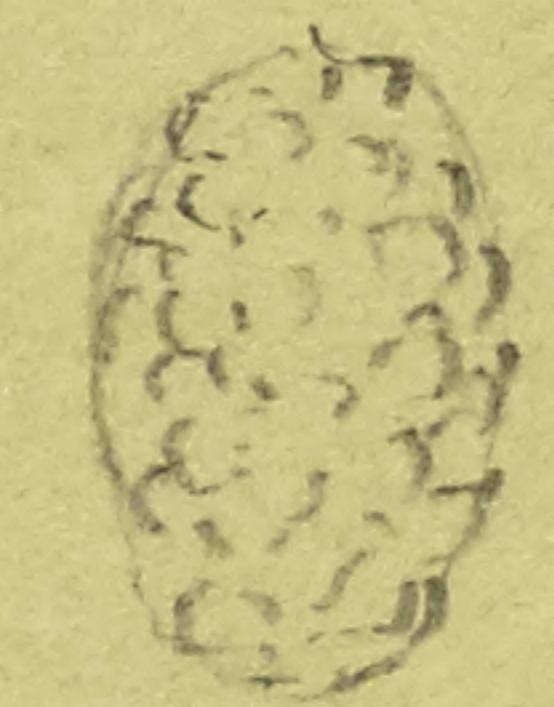
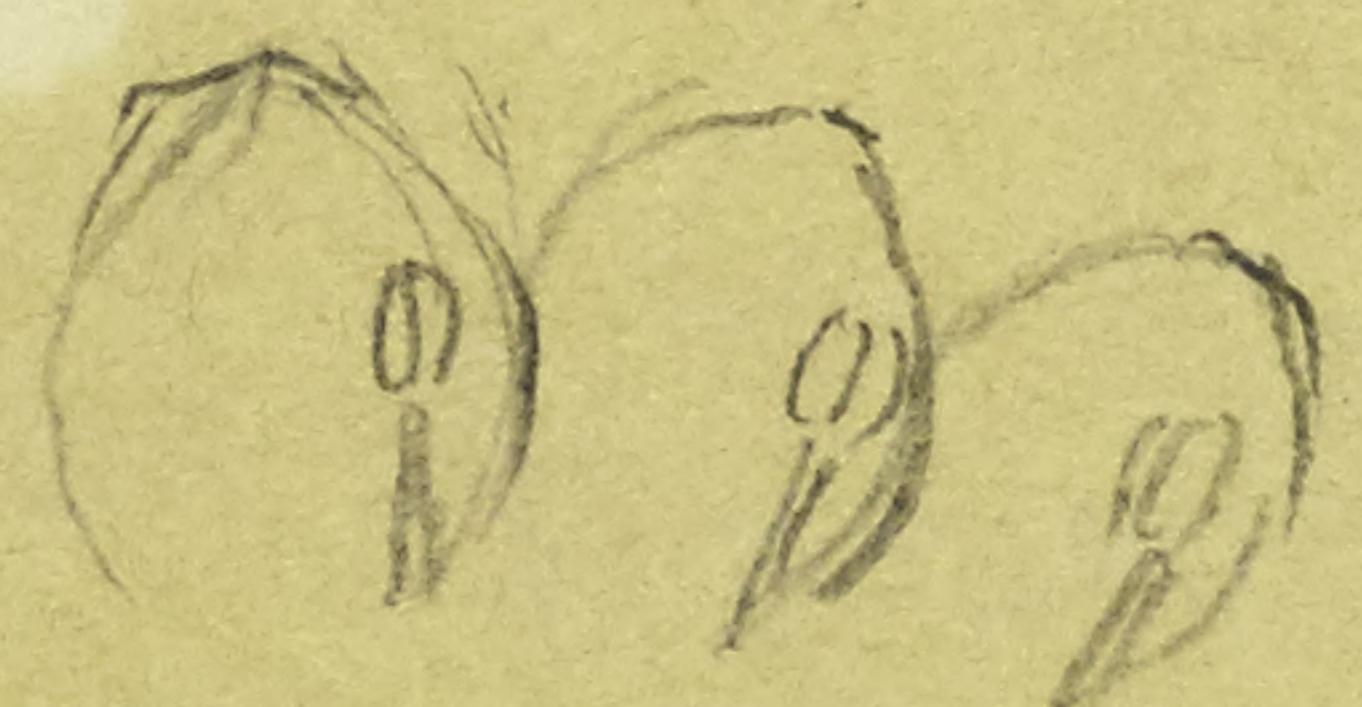
Nov 6 1874

Caliper

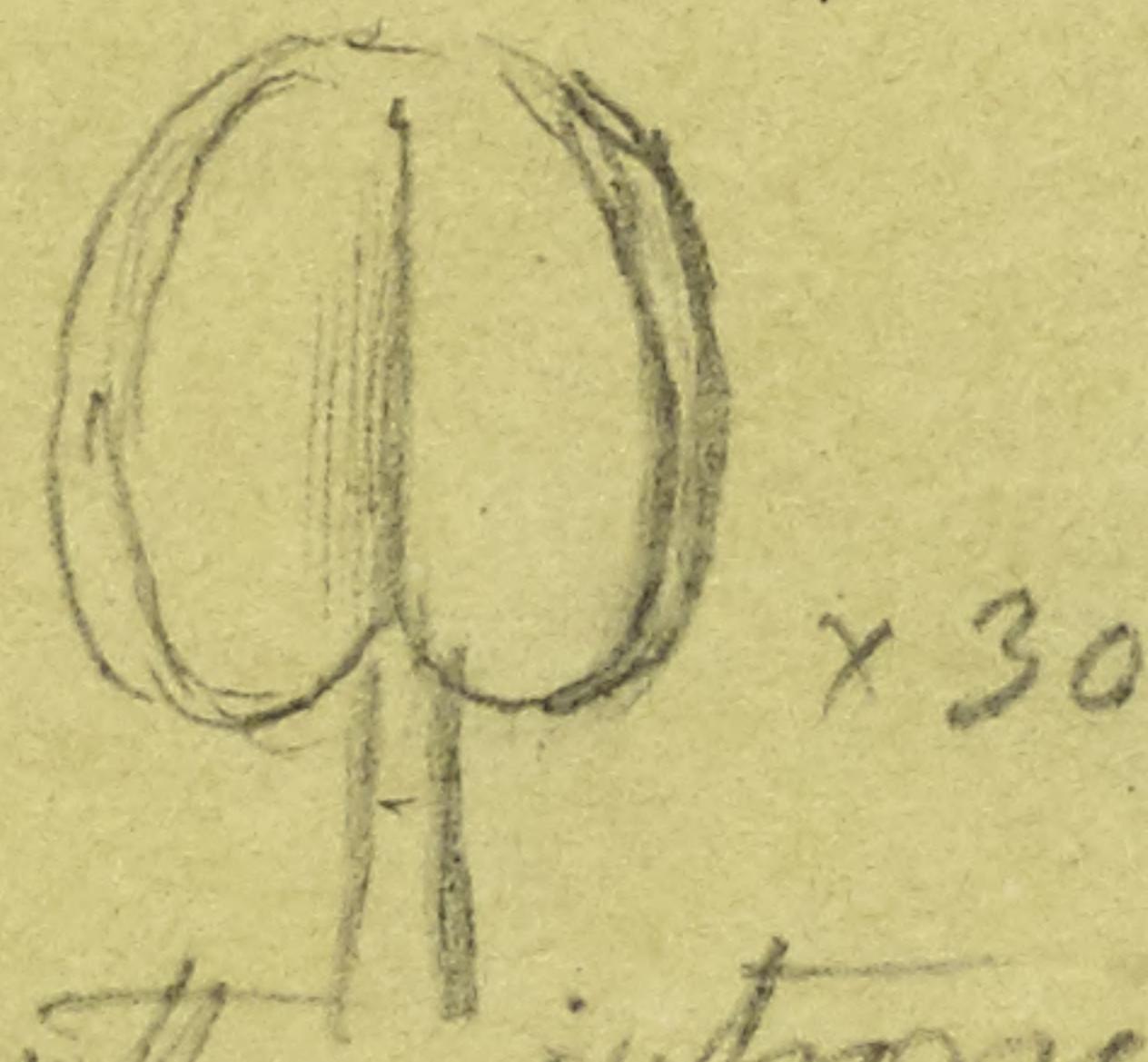
x4



fruit & few calyx & lvs open



seed x 30
reticulate
cordate



anther introrse
not versatile



0 1 2 3 4 5 6 7 8 9 10
cm

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MISSOURI
BOTANICAL
GARDEN

HENRY EHRRARDT,
PHARMACEUTICAL CHEMIST,
No. 301 South Fifth Street, Cor. Myrtle, ST. LOUIS.

187

Date

No.

Or

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

4008



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cm

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MISSOURI
BOTANICAL
GARDEN

No.

Date

Dr. For

Jan 1875

Gentian. corona
a laevis ramosa
foliis

Cirradae quadrangularis *Guise* *Guise*
Microrhiza quadrangularis *Guise* *Guise*
parvula annua *simplex* *Guise*
floribus ^{4 mm} longe pedunculatis, ologyze campanulato laxo
^{Guise} ^{crown}
ramis $\frac{1}{4}$ dentatae, corolla ^{crown} campanulata & lobis late ovatis
obtusis s. rotundis
crenatae bracteis

Plantis fusi insertis l'abo Guise; auctis; crenatis
ovatis iatrossis style tenui distato, stigmate
latis semiorbicularibus
capsule ovata
capsule semicilindrica, seminis ovalibus, rotundatis

London
G. & J. Gould
Green

London
G. & J. Gould
Green

May 1866

Plat 1-2 subsp. tif.

For



0
cm

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MISSOURI
BOTANICAL
GARDEN

Dr. GEORGE ENGLEMAN,

N. W. Corner of Garrison Avenue and Locust Street

963

4009

PRESCRIPTIONS

CAREFULLY COMPOUNDED

BY

COMPETENT PHARMACISTS

DAY AND NIGHT.

Stoddard Pharmacy

N. W. COR. EASTON & GARRISON AVES.,

POOL & CO.

MISSOURI BOTANICAL GARDEN
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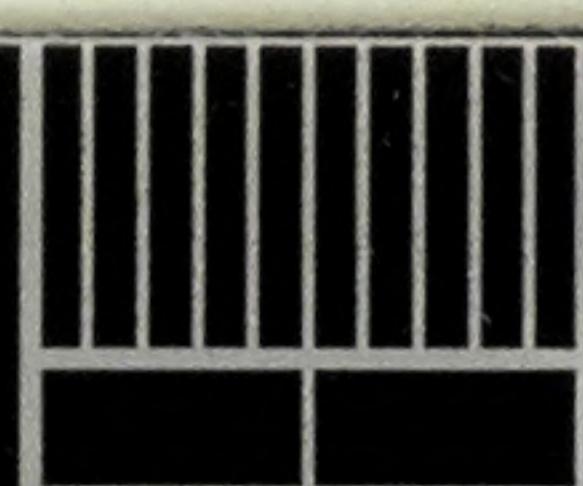
IMPORTED AND ARTIFICIAL

MINERAL WATERS,

NATIVE AND IMPORTED

WINES AND LIQUORS.

FOR MEDICINAL PURPOSES.



0 1 2 3 4 5 6 7 8 9 10

cm

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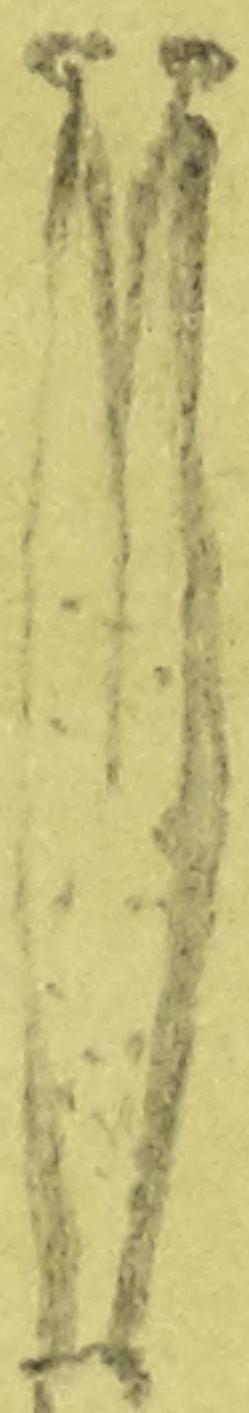


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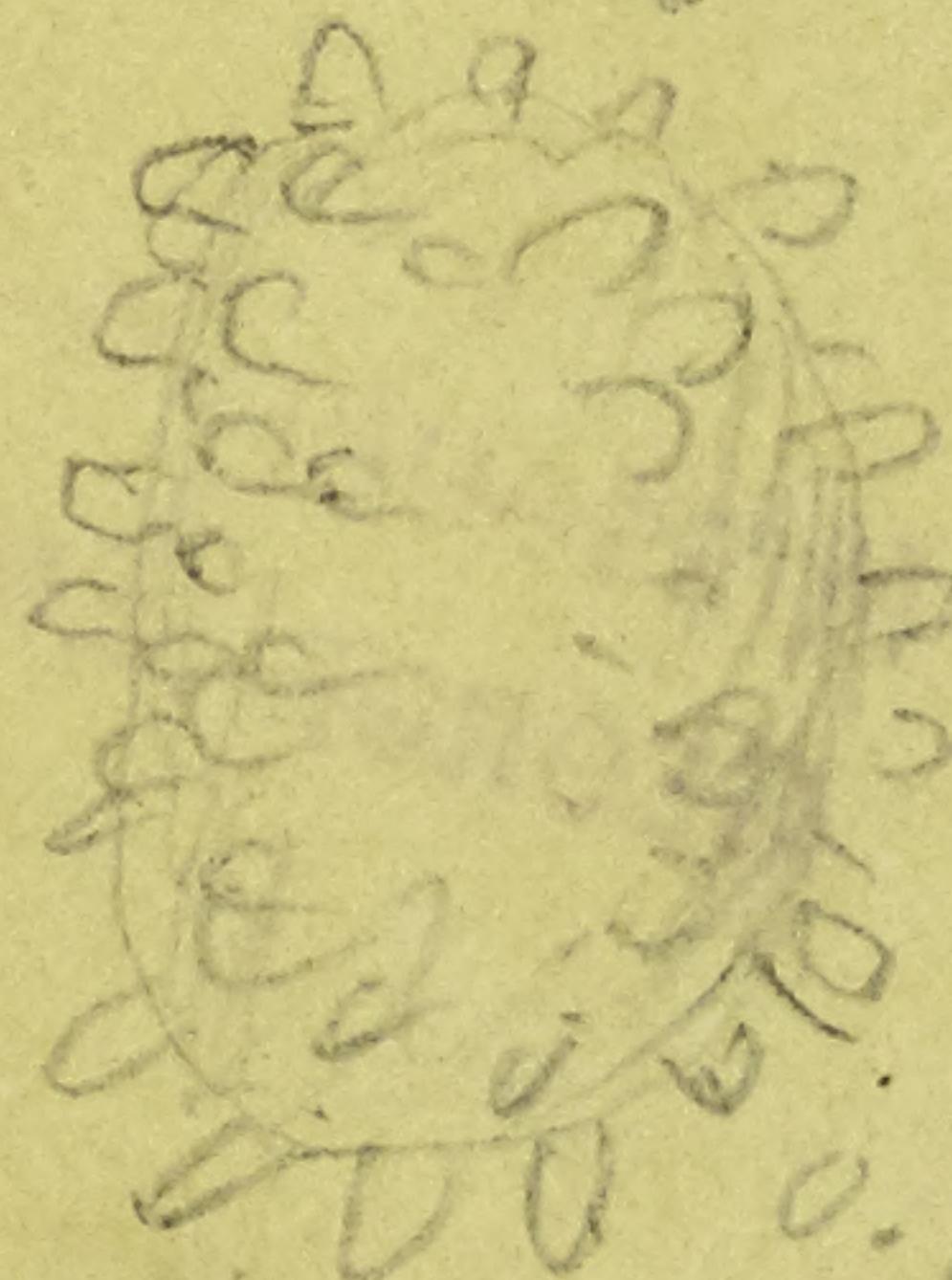
Gentianella serrata Greene

Oct 10 1877
Fla marking

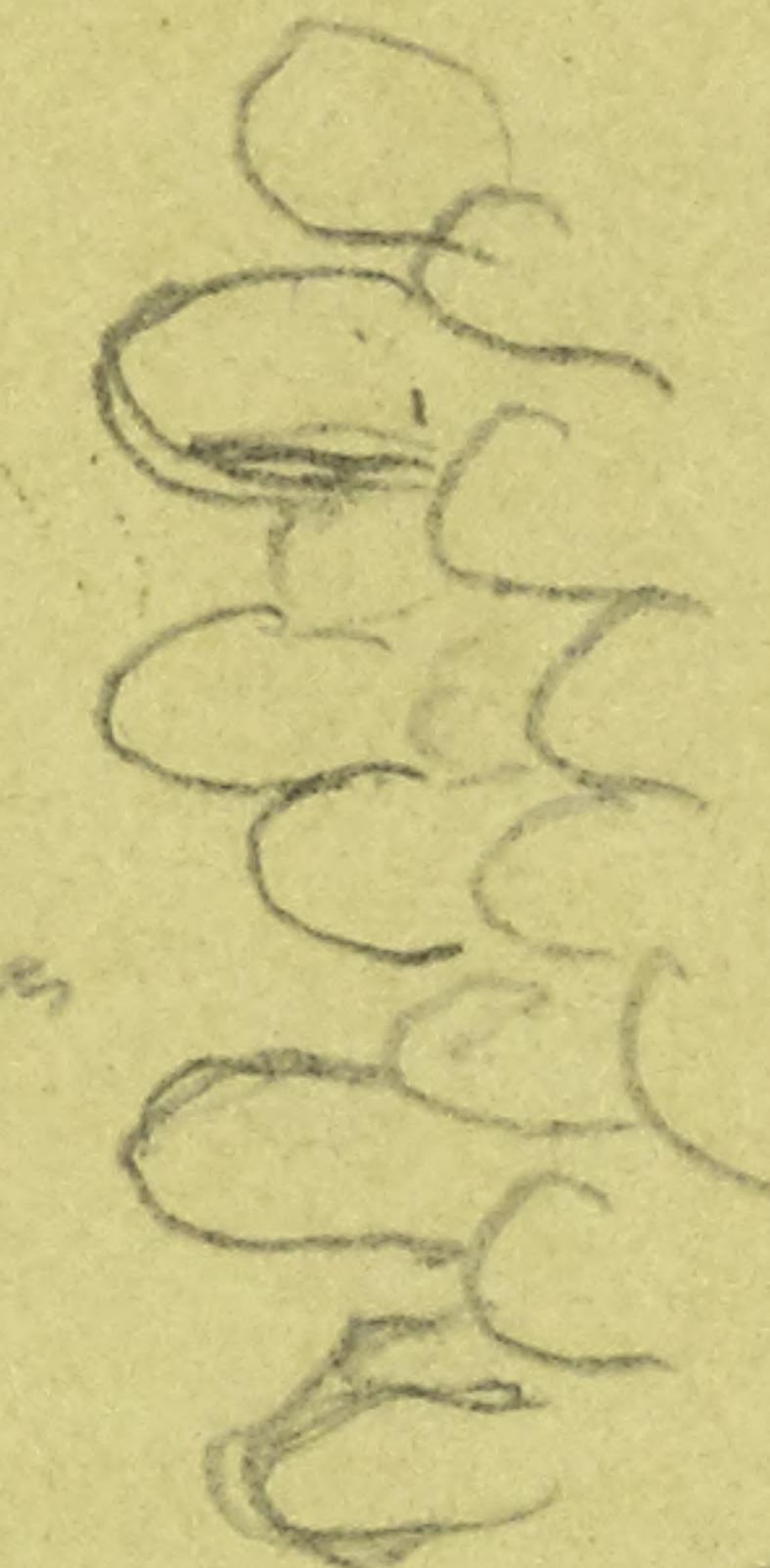
Fl 1864



stigmas brownish
slightly brownish

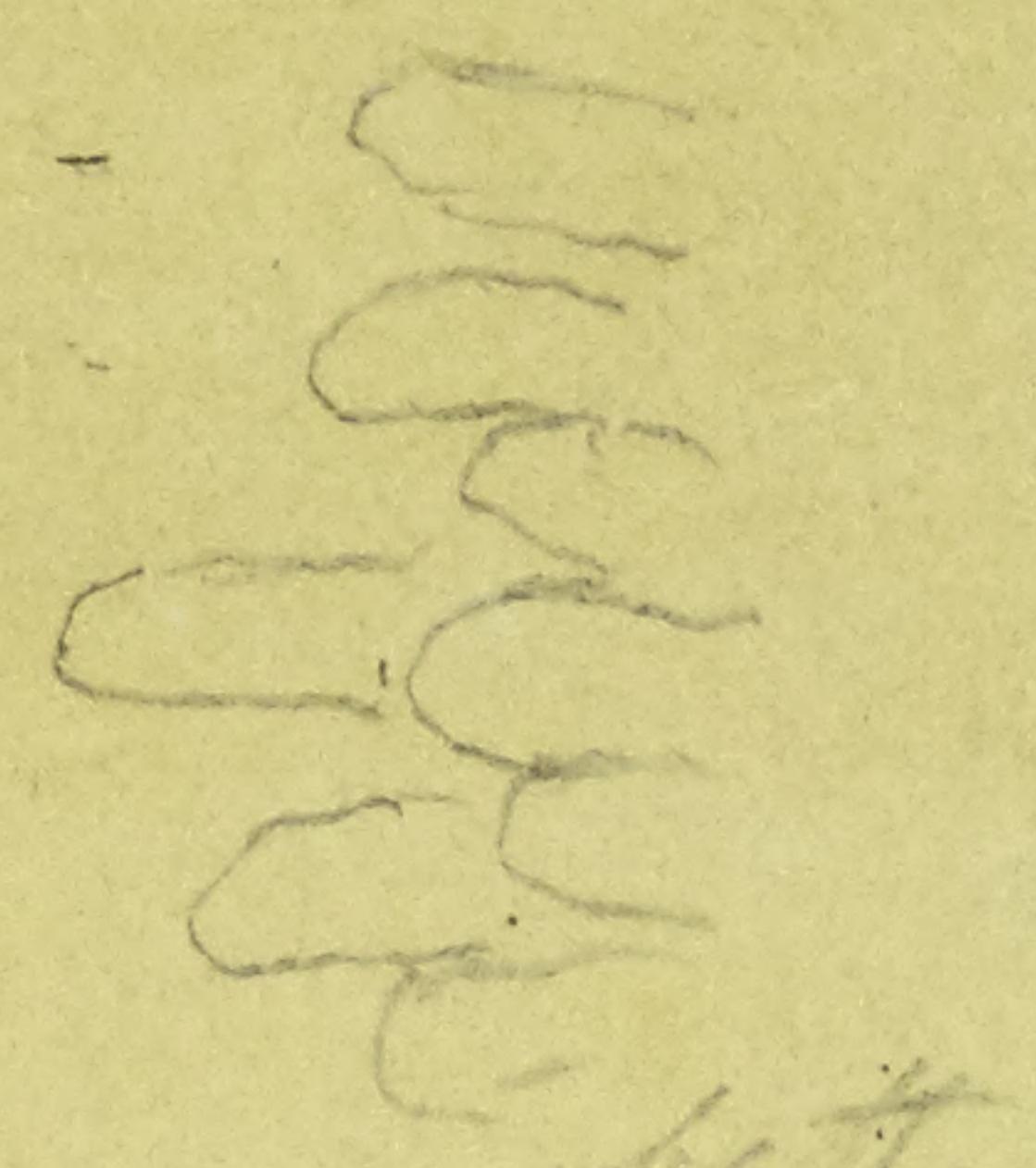


0.7 mm
long



capsule linearis, base attenuata
vix stipitat

x60



vesiculæ
cylindr

bitter.



0 1 2 3 4 5 6 7 8 9 10

cm

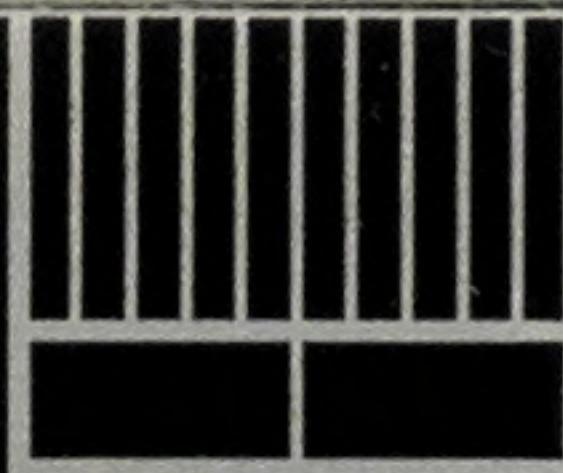
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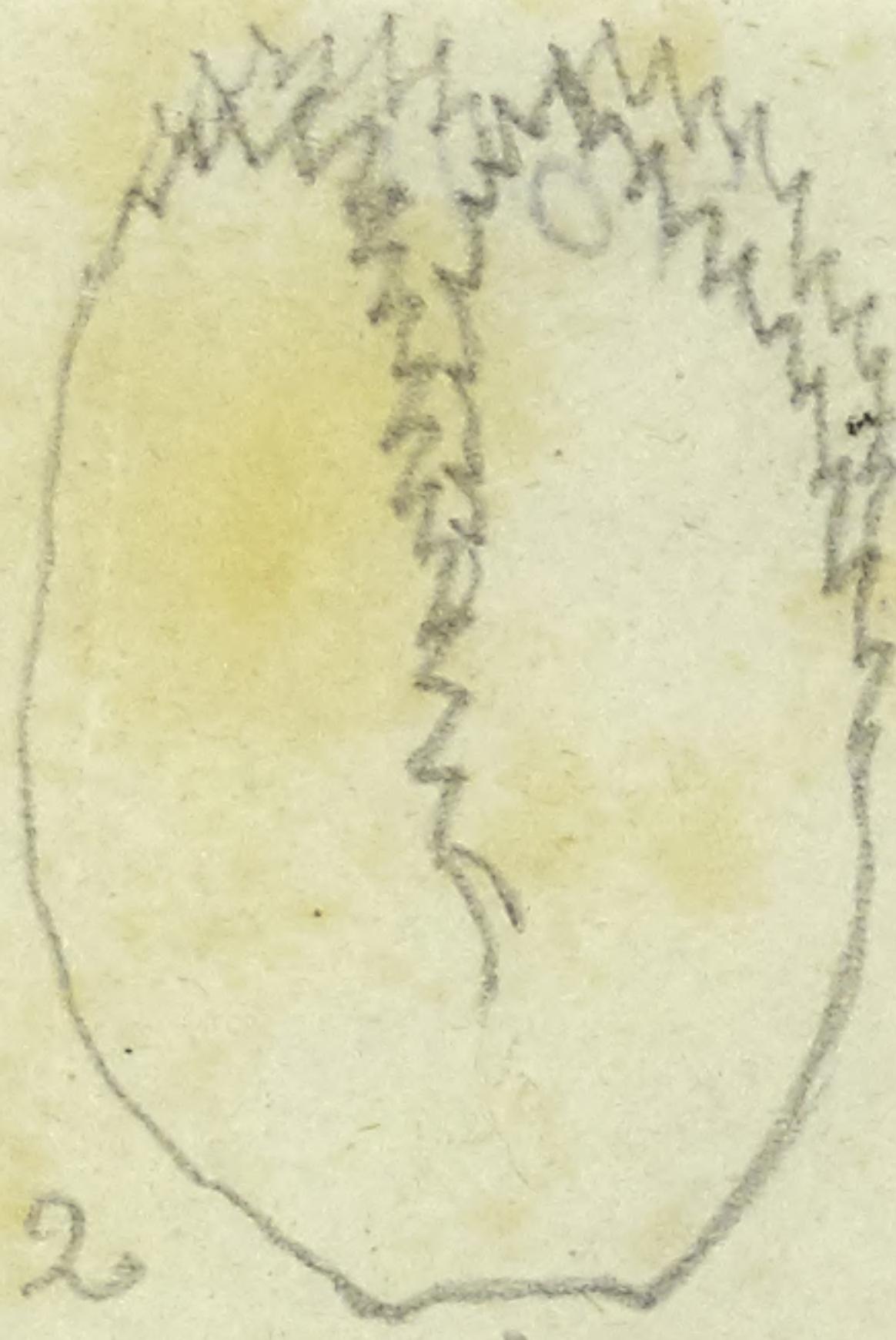
0 1 2 3 4 5 6 7 8 9 10

cm

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2



3

Gentianella Grisea
white flowers with yellow
anthers Hook fl. Sord.

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GEORGE ENGELMANN

10

1850



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10
9
8
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cm

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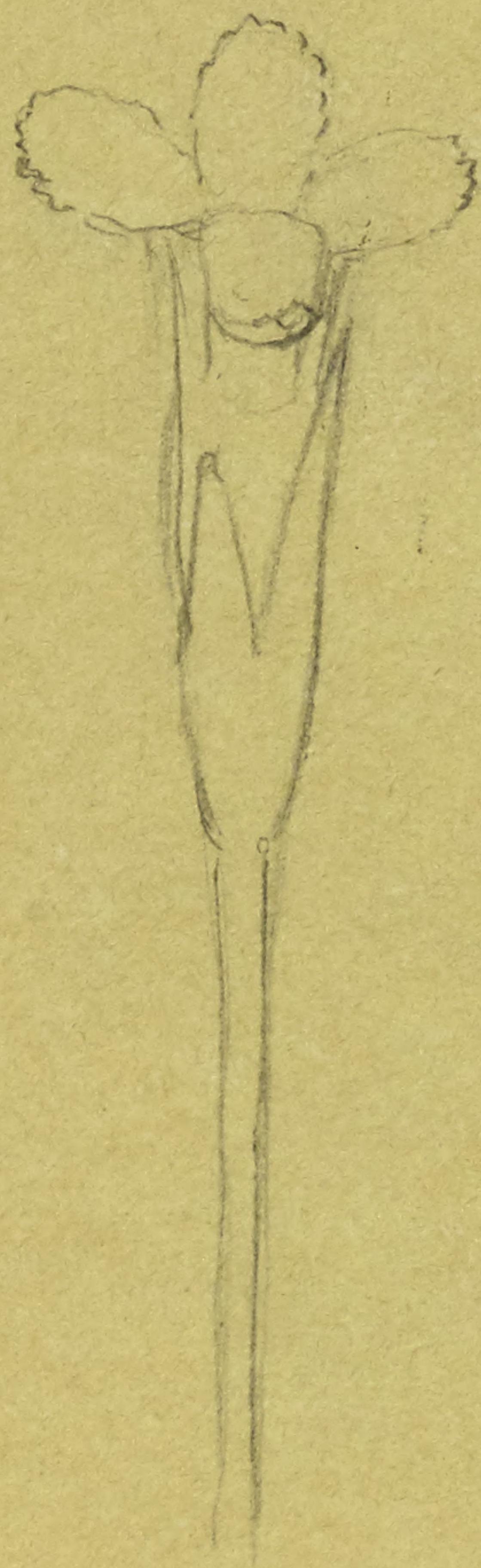
Hook & Scott.
in ~~water~~

Genl. singularis A. Gray!

Upper Klamath Lake Aug 22

Nov 17 1874

J. D. S. Newberry

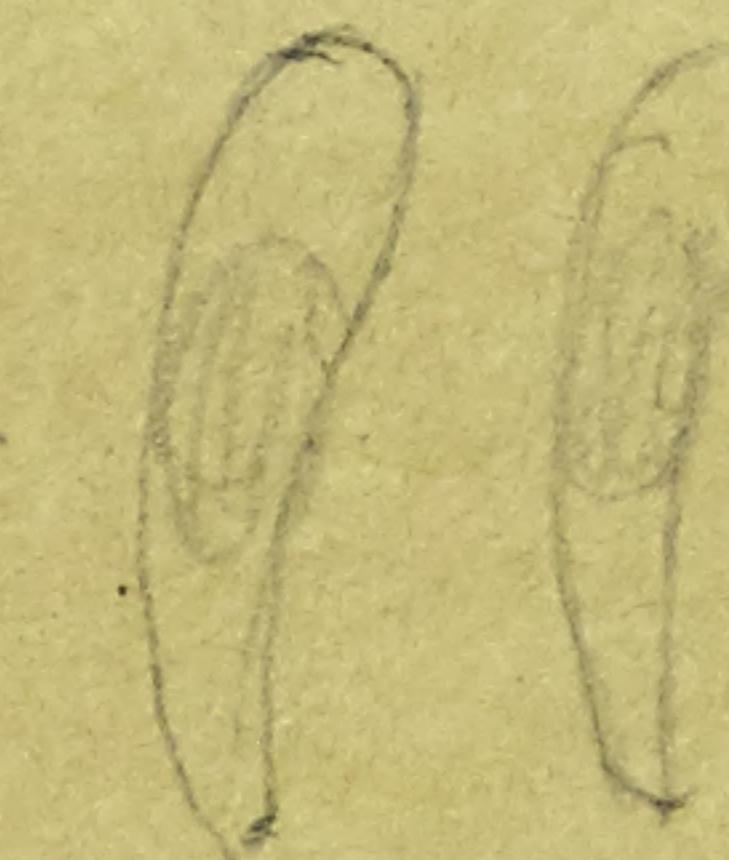


x 2



dorsal

x 10



ovules x 30



0 1 2 3 4 5 6 7 8 9 10

cm

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PHARMACEUTICAL CHEMIST,
No. 301 South Fifth Street, Cor. Myrtle, ST. LOUIS.

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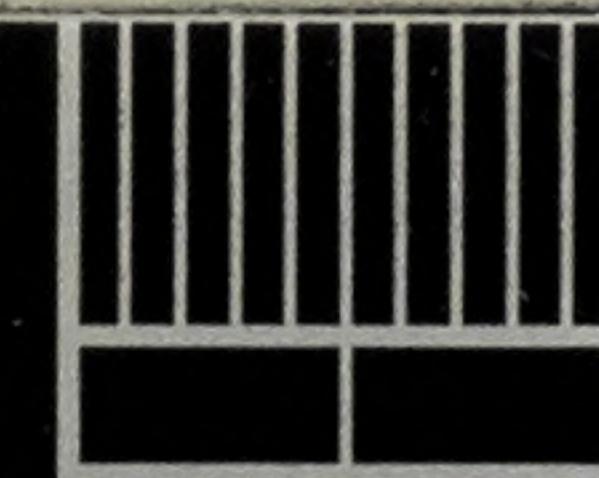
Date

No.

RR

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GEORGE ENGELMANN

7012



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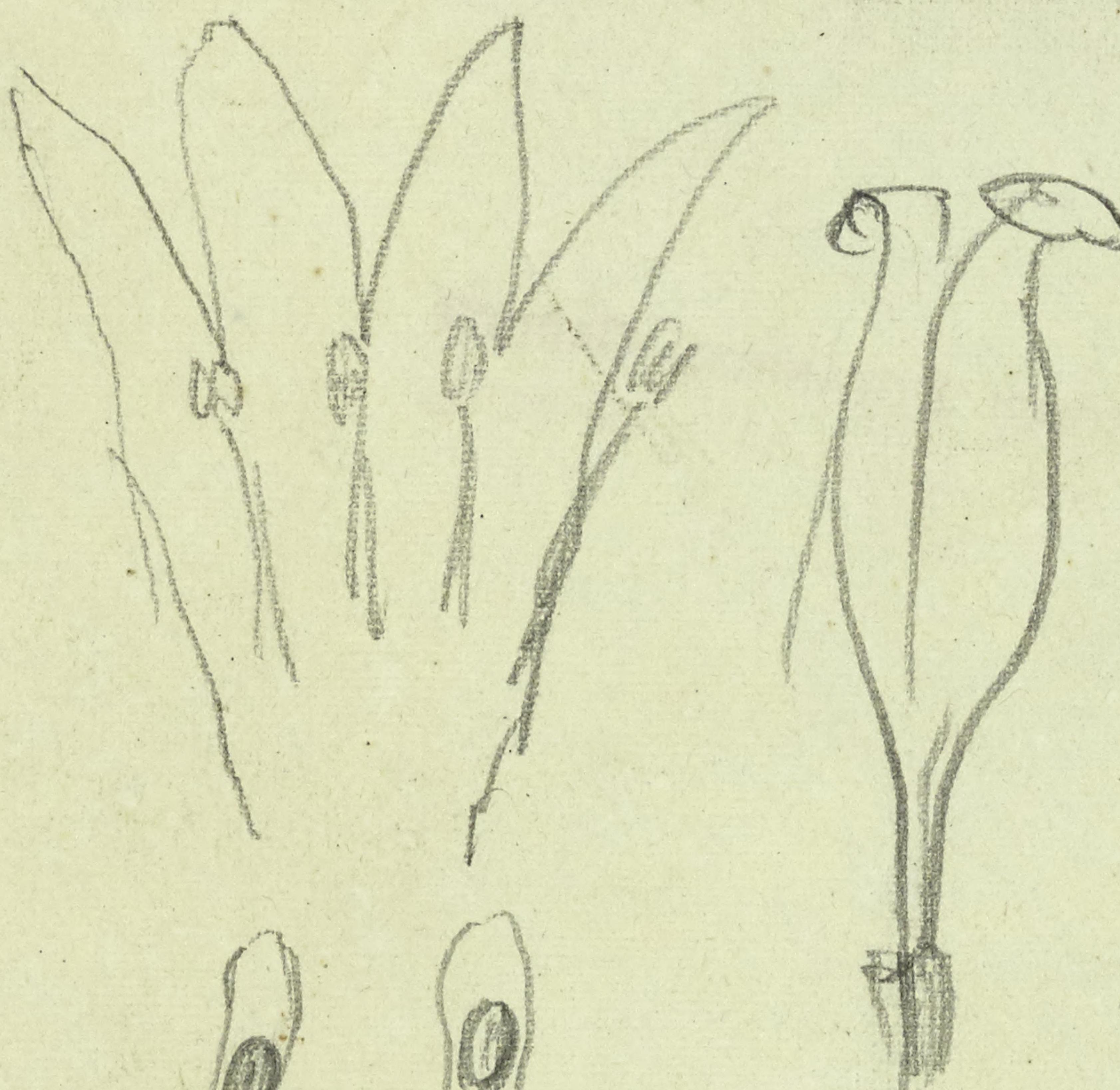
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Gentiana Simplex ~~Hedw.~~ ^{J. Gray}

P.A. VI. p. 87
t. XVI



Annual

Klamath Lake

seed

G. simplex is evidently a
Crossopetalum, with the seeds
of *G. ciliata* (not of the
other Am. spec.) but annual
and without corolla!



0 1 2 3 4 5 6 7 8 9 10

cm

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St. Louis, Mo.
NORTH THIRD STREET
No. 14
Apothecary & Office
Dr. William E.



0 1 2 3 4 5 6 7 8 9 10

cm

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Gentian simplex Gray

Oct 10 1877

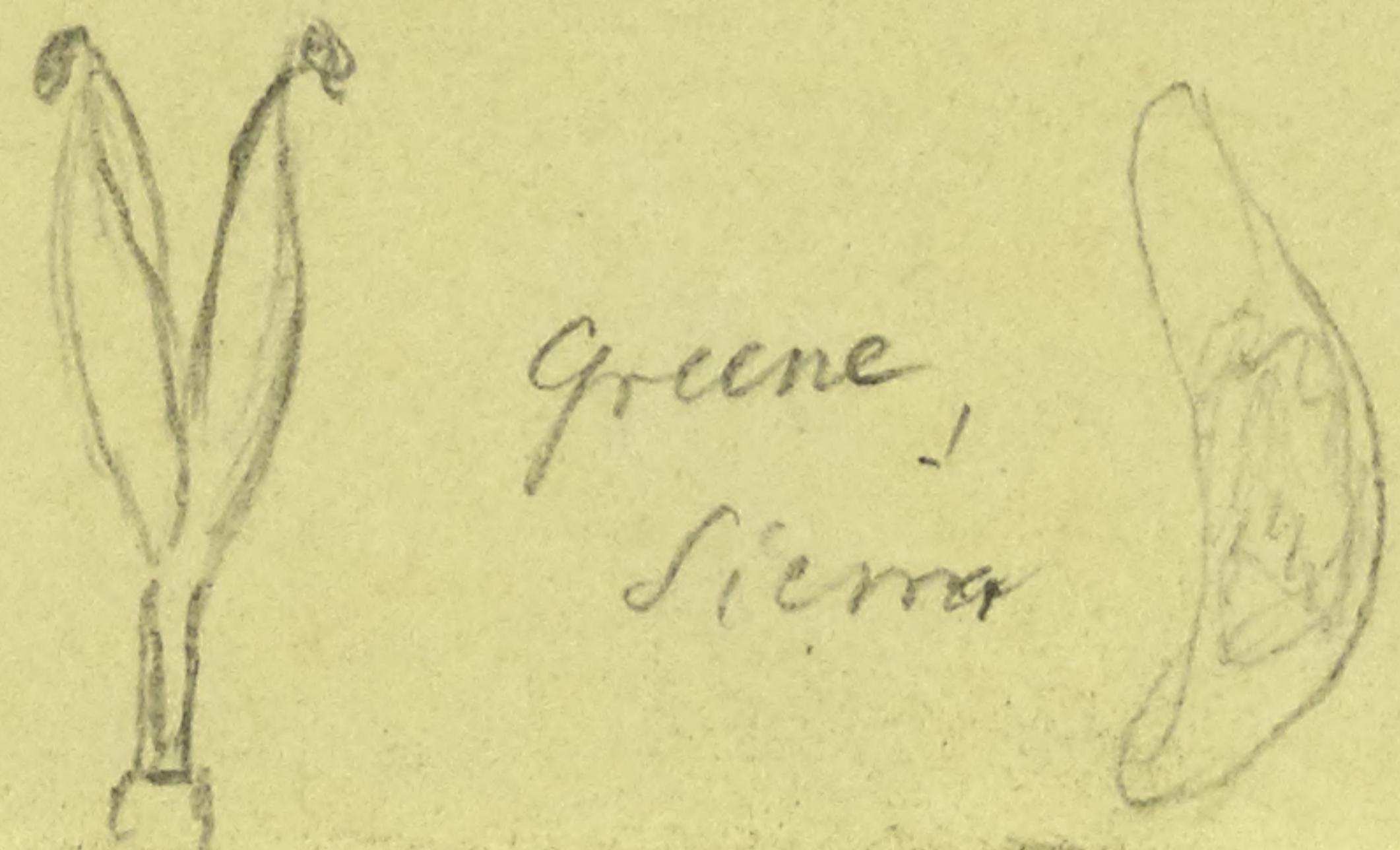
five Gray

Brewer 2153



x30

0.8 mm long



0 1 2 3 4 5 6 7 8 9 10

cm

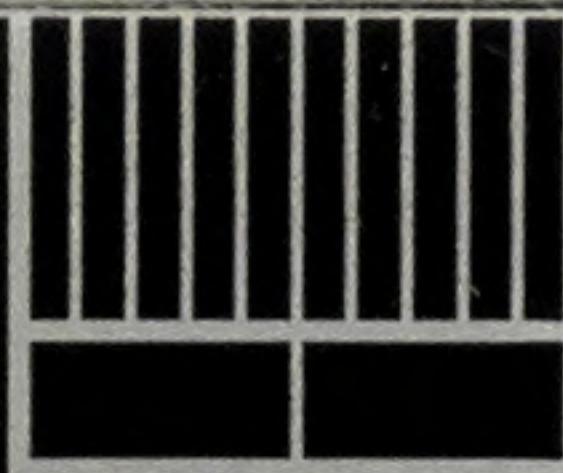
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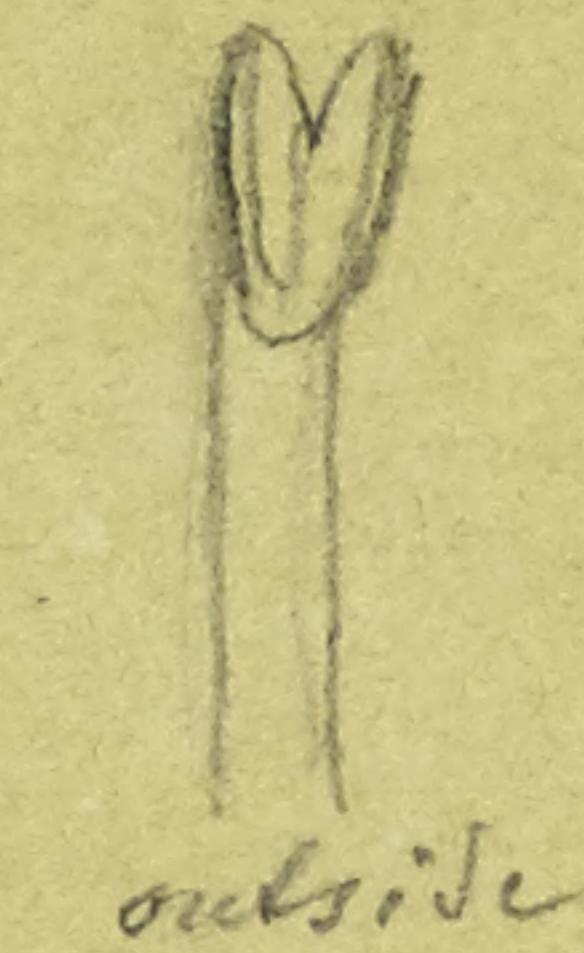
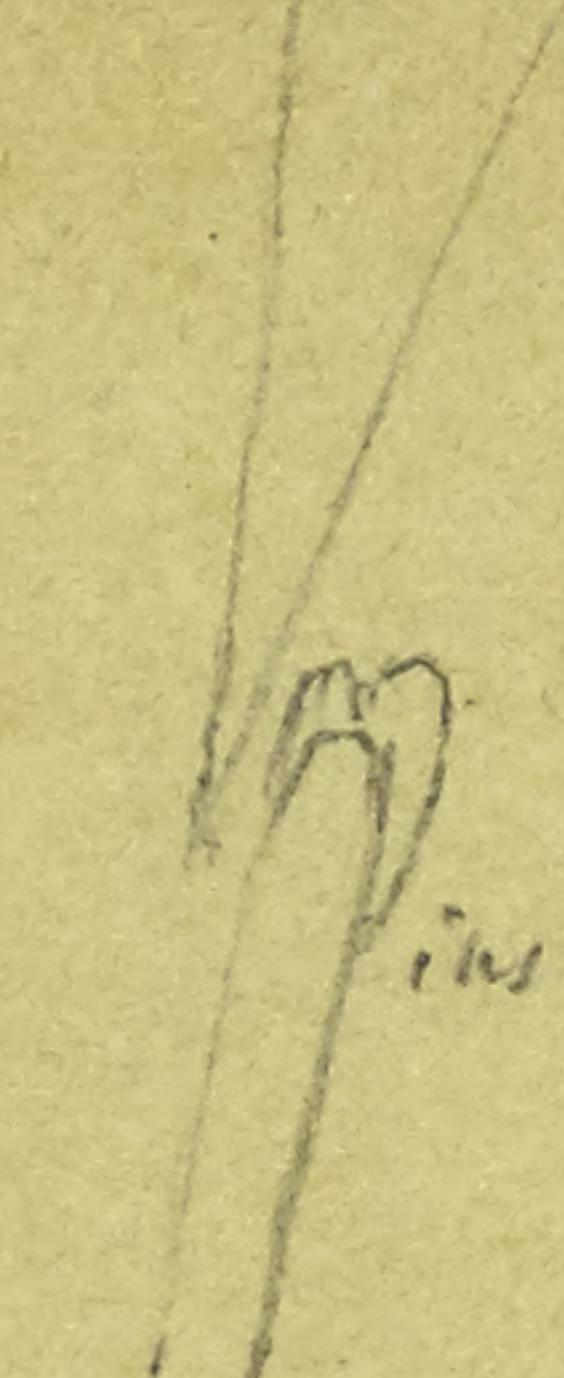
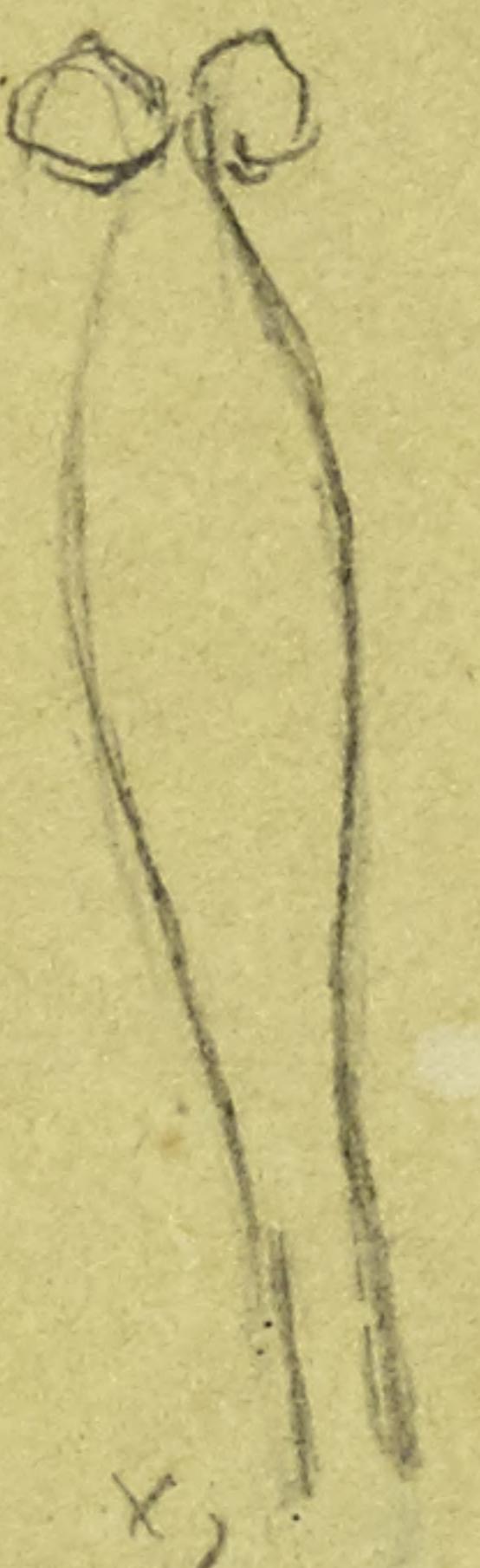
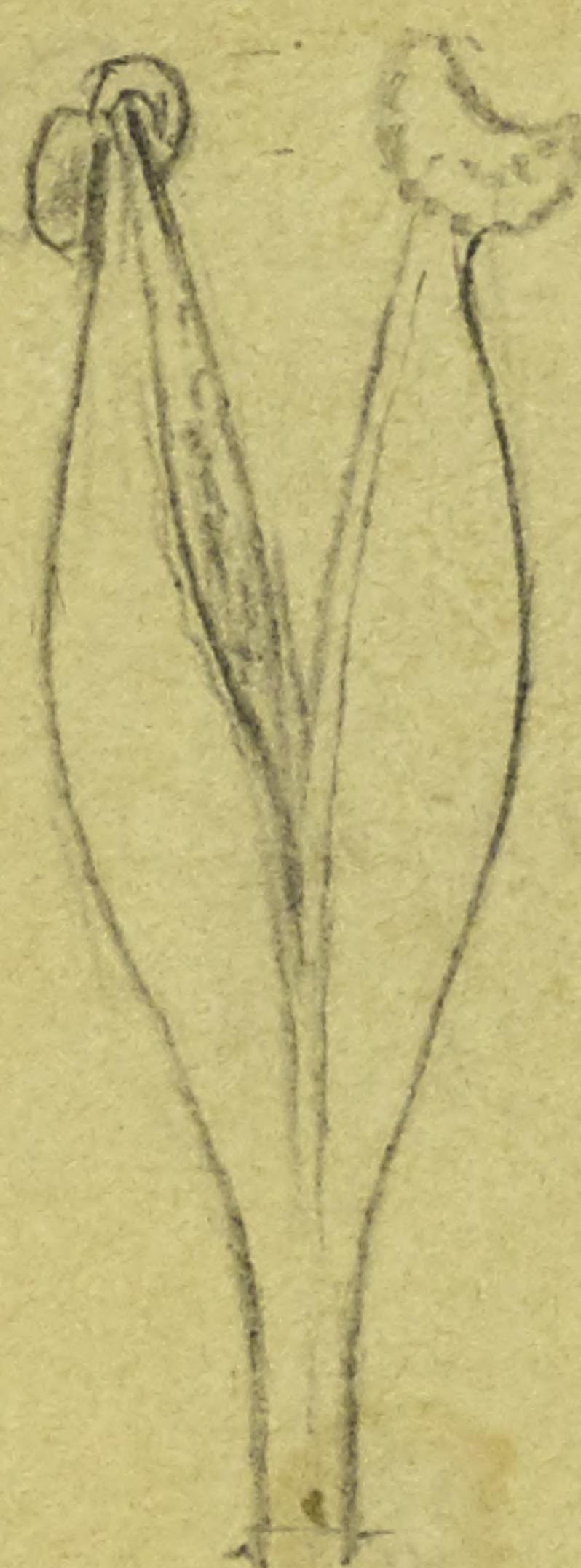


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385 *Gentiana simplex fimbriata*

Nov 5 1874

fruit x 2



effete anthers
x 2

base of flower x 2

immature
seed x 30



ovule x 30

olys about as long as tube

Tube a little shorter than lobes

filaments inserted in middle
of tube, smooth

reaching to top of tube

Anthers reversed (effete)

ovules on whole surface of ovary

stems reaching to the fruit, pistil of about same length
as between stems much shorter, but pistil as long as tube



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cm

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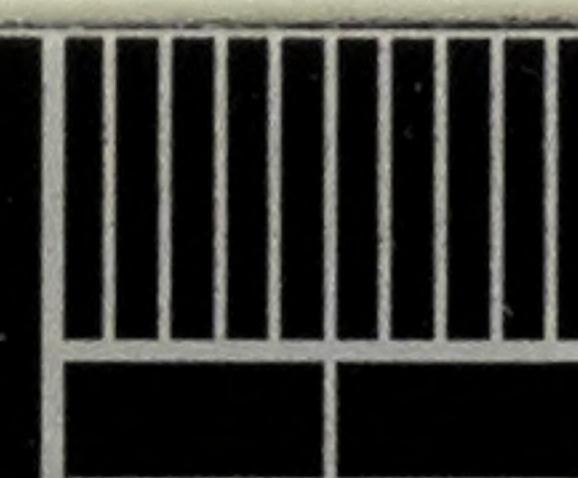
Date

No.

Or

4015

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cm

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Genl. Anderson ^{in May 1870}
Cobs reduced to single tooth
small

New Haven - Columbus Ohio, Buffalo,
Auburn N.Y. - Saratoga west N.Y.

Genl. *Lepuus* with long plumes as long
as Cobs, or shorter - seeds large
with broad.

Genl. *leucurus* - *Premnonthus*, plume
shorter, very oblique and almost
entire seed much smaller, narrow
but cells of seed as large, as in *Premnonthus*

Genl. *Premnonthus* has very small, narrow
big cellular seeds - very oblique' &
entire plume

J. Green's Maine, N. Hampshire, Lake Superior
Glacier of Maryland, New Brunswick.
Porcupine Mountains.



0 1 2 3 4 5 6 7 8 9 10
cm

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about a line above the base of the
rises into three, the later al
~~fork~~ soon fork twice,
not send off decurrent rami-
s in the manner of P. Car-
; the midribs produce
te branches, and all give
lets which ~~are~~ not rarely
more.

GEORGE ENGELMANN PAPERS
MISSOURI BOTANICAL GARDEN

9104



0 1 2 3 4 5 6 7 8 9 10
cm

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Gent. alba Knobl (flavida Gray) Miles of Virg-
Illino (Webb, Gray) date super.
Marsh on Ohio River

G. odontoleuca Lancaster Pa. Pitts, Washingt DC
S. Carol., Bedford Co Va. Molter, ^{of} John Borth
afer *var. oblonga*

Cambridge Oct 1876



0 1 2 3 4 5 6 7 8 9 10
cm

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~~Parnassia palustris~~ Linn., var.
Californica. Sub-sesqui-pedalis;
foliis radicalibus fere semper rotatis
lani in petiolum angustatis, caulinis
paucis vel nullis; petalis sub-
orbiculatis, venis largiter venosis;
staminodis latis ~~tenitis~~⁵⁰² ~~24-foatis~~^{setosis}.
- Margin of streams on Red Mountain.



0 1 2 3 4 5 6 7 8 9 10
cm

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